THE EDUCATION AMENDMENT ACT, 1980 (BILL 82) IMPLEMENTATION STUDY

Board Policies and School Level Practices

HARRY SILVERMAN
ANNE KEETON WILSON
WAYNE SELLER

This research project was funded under contract by the Ministry of Education, Ontario.
It reflects the views of the authors and not necessarily those of the Ministry.

Sean Conway, Minister
Bernard J. Shapiro, Deputy Minister

Ministry of Education

88-04131/

THE EDUCATION AMENDMENT ACT, 1980 (BILL 82) IMPLEMENTATION STUDY

Board Policies and School Level Practices

HARRY SILVERMAN
ANNE KEETON WILSON
WAYNE SELLER

This research project was funded under
contract by the Ministry of Education, Ontario.
It reflects the views of the authors
and not necessarily those of the Ministry.

Sean Conway, Minister
Bernard J. Shapiro, Deputy Minister

© QUEEN'S PRINTER FOR ONTARIO, 1987

Order information:

Publications Sales
The Ontario Institute for
Studies in Education
252 Bloor Street West
Toronto, Ontario
M5S IV6
(416) 926-4707

Will invoice on orders over $30.00.
Other orders must be accompanied by a
cheque or money order payable to
O.I.S.E.

MGS Publications Services
880 Bay Street, 5th Floor
Toronto, Ontario
M7A IN8
(416) 965-6015
(Toll Free) 1-800-268-7540
(Toll Free from area code 807)
Ask operator for Zenith 67200.

Order must be accompanied by a cheque
or money order payable to the
Treasurer of Ontario.

Contract 0652
ON0 4230

Canadian Cataloguing in Publication Data

Silverman, Harry, 1933-
The Education Amendment Act, 1980 (Bill 82)
implementation study

Bibliography: p.
ISBN 0-7729-2856-8

1. Exceptional children — Education — Ontario.
2. Ontario — Education Act. I. Wilson, Anne Keeton, 1944- .
II. Seller, Wayne. III. Ontario. Ministry of Education.
IV. Title.

LC3984.2057.S54 1987 371.9'09713 C87-099644-4

Table of Contents

Acknowledgements iv

Abstract v

1. Introduction to the Final Report 1
1.1. Effective Schools 2
1.1.1. Instructional Leadership 3
1.1.2. Parental Involvement and Support 4
1.1.3. Instructional Effectiveness 4
1.1.3.1. Classroom Characteristics and Practices 4
1.1.3.2. Implications for Special Education 5
1.1.3.3. Purposes of the Research 6
1.2. Organization of the Report 9

2. Summary of Results, Discussion and Implications 11
2.1. Implementation 11
2.1.1. The Operational Definition of Levels of Implementation 11
2.1.2. Summary of Results and Discussion - Implementation 13
2.1.3. Summary of the Implementation Findings 18
2.2. Impact 19
2.2.1. Operational Definition of Impact Variables 19
2.2.2. Goal Specificity and Relatedness 20
2.2.3. Teacher Effort and I.P.P. 21
2.2.4. Use of Resources - In School 21
2.2.4.1. Principal/Vice-Principal 21
2.2.4.2. Peers 22
2.2.4.3. Board Resources 23
2.2.5. Summary 23
2.3 Examples of Innovative Delivery Models 24
2.3.1. Large Elementary School 24
2.3.2. Small Elementary School 24
2.3.3. Secondary School 25

Bibliography 26

Appendix A 29
A1 Criteria for Rating the Principal Profile 30
A2 Criteria for Rating the Teacher Profile 41
A3 Impact Variables Rating Scale 57

Appendix B 61
B1 Design and Procedures 62
B2 Results - Implementation 78
B3 Results - Impact 112
B4 IPRC Study 128

Appendix C 176
C1 Principal Interview - English 177
C2 Teacher Interview - English 185
C3 Principal Interview - French 205
C4 Teacher Interview - French 209

Acknowledgements

The authors wish to thank many people who have provided their time and resources to this project. Our OISE research team has included Enid Gossin, Adele Churchill and Dr. Ken Clarke. Dr. Bob O'Reilly at the University of Ottawa conducted the French interviews, and translated them into English for us. Our colleagues at the University of Western Ontario, Drs. Merrill Sitko, Carol Crealock and Mrs. Patsi Allison, have been supportive and encouraging, and we look forward to continued collaboration with them. Thanks are due also to Dr. Ron Posno for assistance with the funding study and to Mike Rethazi for the analysis and report of the provincial IPRC study. Data analysis was conducted under the watchful eye of Susan Elgie of OISE's Computer Services Group, and with the help of Jamie Metsala and Jeff Forde. An excellent job of typing and editing was undertaken by Carol Barnes and Denise Carr.

Our school boards have been unfailingly supportive. In particular we thank the liaison people and superintendents of special education in each board, and Dr. David Ireland of the Carleton Board of Education. Our greatest thanks are due to the principals, teachers and resource staff who shuffled timetables and personnel to accommodate our interviewers, and who gave considerable time to us.

Abstract

A longitudinal study was conducted in six Ontario school boards to assess the extent to which the boards had implemented the requirements of the Education Amendment Act, 1980 ("Bill 82", December, 1980) and the gains in implementation that had occurred between 1982 and 1986. The study also examined the special education delivery models offered in the 46 schools sampled across the six boards, and the impact of differences in policy and practice on teachers' opinions and actions. A total of 65 teachers and 37 principals in 1982-83, and 112 teachers and 44 principals in 1985-86 participated in the study. Interviews were also conducted with superintendents and board resource personnel. Principals were interviewed to ascertain their philosophical position regarding special education delivery, and the current status of the special education programs and services in their school. In the final year of the study reported here, the principals' descriptions were ranked on scales of implementation and were compared with those of three teachers, a regular class teacher, a special education teacher and a resource teacher in each school. The teachers were also interviewed about their classroom instructional practices in relation to pupils whom they nominated as being of concern. Nominated pupils included both those who had been deemed exceptional and those who had not.

The results indicated that the implementation ranking scales had high levels of reliability. Implementation gains had occurred in all sectors of the education system involved in the study. Special education provisions were described by principals as being at a higher level of implementation than those described by teachers. Of the three teacher groups, resource and segregated class special education teachers described provisions implemented to a greater degree than did regular classroom teachers. Elementary school staffs rated higher than secondary school staffs, although secondary school personnel had made greater gains in implementation over four years of the study.

In examining the relationship between principals' level of implementation and teachers' level, the results indicated that high-rating principals had most influence on the identification,

program and review procedures of staff. Communication among staff and with parents did not correlate with other implementation factors. In turn, special education segregated class teachers' ratings correlated with resource teachers' ratings on identification and program factors. Regular classroom teachers' ratings appeared to be relatively immune to the philosophical positions of and the provisions made by the other groups.

In the second, impact component of the study, the following conclusions were drawn:

a. Different delivery models do not have a significant impact on the resources and services available to and used by the regular and special class teachers. The resources of fellow teachers were the sole resources considered to be useful.

b. Any change which resulted in the success of programming pupils both before and after referral to an Identification, Placement and Review Committee (IPRC) did not result in an increase in accomplished objectives.

c. Teachers were not differentially affected by alternative delivery models in terms of their perceptions about the resource support available to them.

A revised provincial IPRC survey is included in the report which describes in detail differences between 96 Ontario school boards in the implementation of the IPRC requirements of O.Reg. 554/81 in terms of structural variations, attendance patterns, time commitment, information used and types of decisions made.

A number of instruments, rating criteria and scales were developed through the course of the study and they are presented in Appendix A of the report.

Chapter 1

Introduction to the Final Report

In the last ten years, a body of literature on special education has addressed optimal methods of delivering special education services in a school system. In this literature, special education researchers have raised many iconoclastic questions about the effectiveness of special education programs and procedures. Much of the literature has favored a shift in the focus of special education away from placement of pupils in segregated classrooms, and from the diagnosis of presumed deficits towards an emphasis on prevention and on providing appropriate instruction in the regular classroom, i.e. in the educational mainstream, for pupils identified as having exceptional needs. Yet, studies of "mainstreaming" have questioned whether it works, how teachers view it, what impact it has on other students and on teachers' morale, etc. (Carlberg & Kavale, 1980; Speece & Mandel, 1980; Strain & Kerr, 1981; Howart, 1983).

The literature on delivery systems for special education leaves much to be desired in attacking the questions of educational effectiveness in special education. While many people promote various delivery alternatives, such as mainstreaming (Nelson & Greenough, 1984; Stainback & Stainback, 1985), the use of resource rooms (Speece & Mandel, 1980), and consultation support to regular class teachers (Miller & Sabatino 1978; Knight et al., 1981), the research makes an association between quality and effectiveness of education: pupil progress is associated only with the location in which instruction is provided, i.e. in a regular class, resource room or a segregated class, thus failing to take account of the complexity of schools and school systems. Consequently, the literature on the impact of special education delivery models is at best equivocal, tending to focus on two variables in isolation, and ignoring the impact of school and classroom climate or philosophy on program planning and implementation in a special education delivery system. The present study explores the ways in which the 1980

Education Amendment Act, (Bill 82) was implemented in a number of school boards, but it goes beyond mere monitoring and description and examines the extent to which different models of implementation have differential impact on teaching approaches to exceptional children. The present study ties together research procedures and the focus of special education with those of implementation research in an overall conceptual framework of effective schools.

1.1 Effective Schools

Learning is an individual process that is shaped in the classroom. On a daily basis, teachers and pupils work together to extend and refine each learner's set of concepts and skills. However, that learning process is affected by the climate of the school. The qualities of the school and the leadership provided by the principal can either enhance or detract from the classroom learning environment. Consequently, the ultimate test for any major educational innovation (such as Bill 82) is how much it influences school characteristics and classroom practices.

The effective schools research identifies practices and characteristics associated with the pursuit of instructional effectiveness. These "effective schooling practices" include elements of schooling associated with (a) instructional leadership, i.e., what principals do to sustain a positive climate for academic achievement and to support effective classroom teaching; (b) clearly defined curriculum, focused classroom instruction and management and close monitoring of student performance; (c) clear expectations, consistency and collaboration among teachers and resource facilities; (d) clear and stable policies, expectations for improvement and a strong system of support; (e) consistent communication between staff, students and parents. These factors can be divided into two groups: organizational effectiveness that relate to the school as a whole and instructional effectiveness that relate to classroom instructional practices.

1.1.1 Instructional Leadership

Principals of effective schools voice and demonstrate commitment to an adopted innovation and follow through by seeing that ongoing assistance and interaction occur within the school. Their leadership is instructionally focused with an emphasis on curriculum and instruction for individual differences; clear goals and high expectations for teachers; parental involvement and support; intense interaction and communication among teacher and between teachers and consultants, and collaborative planning and implementation. Sometimes principals become involved directly in seeing to it that these factors become integral parts of the school's characteristics; in other situations they may actively facilitate assistance by others: in still other situations the principal may respond supportively to the activities of teachers in this regard (Fullan, 1985).

Another factor distinctive of effective schools is collaborative planning and implementation which consists of teachers, the principal and resource personnel continually striving to improve instructional effectiveness; there is an expectation that educational programs will be changed so that they work better and staff members discuss program implementation and share ideas and approaches. Effective schools are usually places of intellectual sharing, collaborative planning and collegial work. Staff interaction is characterized as task focused, co-operative and frequent (Rosenholtz, 1985).

An effective informal communication system within the school serves a formative evaluative purpose by influencing action (Fullan, 1985). In other words, in an effective school the principal is supportive, the school policy is clear, consistently enforced, and arrived at collaboratively (Stallings & Mohlman, 1981), and a central focus on learning is all important in pursuing instructional effectiveness.

1.1.2 Parental Involvement and Support

The principal in an effective school influences teacher attitude toward parent involvement by establishing school policy and procedures regarding the ways in which parents are to be involved in their children's schooling, by suggesting that such involvement should be viewed as supporting the instructional program, by clearly communicating the policy and procedures to parents and by pressing for a commitment from teachers that the procedures will be used consistently. In such a situation, teachers initiate and maintain regular contacts with parents and provide information and techniques for helping students learn.

1.1.3 Instructional Effectiveness

1.1.3.1 Classroom Characteristics and Practices

In effective schools high expectations are established for students and instruction is guided by a preplanned curriculum. Learning goals and objectives are developed and prioritized, sequenced to facilitate student learning and organized or grouped into units or lessons; instructional resources and teaching activities are identified, matched to objectives and student developmental levels and recorded in lesson plans; alternative resources and activities are identified, especially for priority objectives; and resources and teaching activities are reviewed for content appropriateness, modified in accordance with experience to increase their effectiveness in helping students to learn.

Further, learning progress is monitored closely using both formal and informal measures and classroom assessments of student performance match the learning objectives. In such a

situation teachers use assessment results not only to evaluate student progress but also to determine whether the teaching methods are working.

A common characteristic in the classroom of an effective school is that of instructional groups formed to fit instructional needs. Thus, small groups are formed within the classroom as needed to make sure all students learn thoroughly. Students are placed according to individual skill levels and the teacher reviews and adjusts groups often, moving students when achievement levels change.

1.1.3.2 Implications for Special Education

The research regarding effective schools has substantial implications for the education of exceptional students. These implications are grounded partly in the fact that the effectiveness literature has focused on student outcomes shared to a significant degree by special educators (i.e. enhanced academic achievement). Further, the effectiveness research has developed concepts and procedures that, in most instances, may not be setting contingent, (Bickel & Bickel, 1986). In fact, some studies of effective schools were conducted in special as well as mainstream educational settings (e.g. Leinhardt, Zigmond & Cooley, 1981). Further, research findings regarding classroom instruction are germane to any instructional setting.

The effective schools "movement" has refocused attention upon school and classroom variables, under the teacher's control, that are related to student achievement. Instructional and leadership variables that affect school achievement positively and directly have been delineated. These variables are related to educational practices that are generic in nature and thus applicable across classrooms, subject area, and regular and special populations. These practices appear to be emerging as a body of research- supported "best practices" from which all teachers can benefit.

A central message emanates from the effective schools research which relates to special education in important ways. The message is that instruction takes place in a larger social

environment, the school, and that school level variables appear to have important roles to play in the development of a productive and effective instructional climate. Consequently, the same school environment that can affect regular classroom instruction will have an impact on special education programs in the same building. Therefore, the need to assess the quality of the instructional environment as part of identifying student needs becomes highly relevant to special education.

The effective school concept afforded the basis for the generation of questionnaire and interview schedules which allowed for an examination of leadership elements as they affect the role of the principal in the introduction and/or fostering of an educational innovation such as Bill 82. It also allows for an examination of such dimensions as the efficacy and the facilitative elements of the instructional program as reflected in teacher behaviours in regard to the classroom atmosphere, level of expectation, use of instructional time, goal-focused activities, and use of resources.

1.1.3.3 Purposes of the Research

The initial purpose of the study was to document the changes in board level and school level delivery systems during the four-year period of implementation of the Education Amendment Act (Bill 82, December, 1980). The study is longitudinal, commencing in the fall of 1982 when school boards were developing their first policies and procedures and disseminating these to schools. Because of a series of research contracts, the study was able to extend to June, 1986, one school year after the September, 1985, deadline for full implementation of the Act's provisions. This longitudinal aspect allowed us to observe the period of growth in implementation at all levels in the school system, from the inception of policies to their full adoption by schools.

The major source of data for monitoring change was provided by interviews with administrations, resource personnel, principals and teachers. Between 20 and 50 people were interviewed bi-annually in each of six school boards. In the interviews, teachers and principals

were asked to describe their roles in special education, their attitudes and beliefs about the new provisions, and their views of the impact of the provisions on their roles. This permitted the researchers to monitor the beliefs and opinions of staff about the provisions for special education, and to gauge the extent to which new policies permeated through the school system. We hypothesized that increased awareness would result in an increased convergence of opinion about the provisions among people at each level in the school system, and within school units, as the four years of the study progressed.

In a separate substudy (see Design section) teachers in four boards, in years 2, 3 and 4, were also asked to describe their concerns about the progress of two or three of their pupils in the first part of the school year, and to state the goals and objectives which they would like to accomplish with these pupils. At the end of each school year, these teachers told us if, and how, their concerns had been resolved, how well the goals had been accomplished, and what services, resources and support each teacher had used to help him or her with each child. This impact component of the research enabled us to gauge how the overall delivery model in a school (as translated from the board's policies by the teacher, the principal and the board's administrators) had affected each teacher's ability to meet the needs of each child. The teacher's own perceptions, attitudes and training could also be assessed. In effect, from the 1983-84 school year to the present, we were able to assess how board level policy becomes translated through school level procedures into teacher effectiveness at the classroom level, how this increased over time and how variations in the translation of policy, particularly within and between schools, has an effect on the ability of teachers to meet the needs of pupils.

To recap, at the outset of the project we intended to monitor the effect of the 1980 Education Amendment Act, as translated into school board policies and disseminated to administrators, principals and teachers. We hypothesized that the implementation of the Act's and the boards' policies would increase, that the divergence of opinion about the policies would decrease and that attitudes toward the policies and toward dealing with exceptional children in general would improve.

By the mid-point of the project, considerable variation was found to exist in the translation of the policies, particularly from principal to principal within a school board. While

an overall increase in implementation was apparent, there remained considerable divergence in translation of policies at the school level. This led us to design a second, impact component into the study, to monitor the efficacy of the school's policies in terms of the resources, support and services used by individual teachers, as described above. This component is unique when considered in the context of the existing research. While monitoring such complex factors as school-to-school variations, and teacher preparation, beliefs, and attitudes, the degree to which a sample of pupils improves over a school term, or year, can be judged. This is assessed by the fulfilment of objectives set by their teachers and from documentation of their individual program plans. Each pupil acts as his or her own bench mark in the assessment of relative gains over the school year. While such data are based on somewhat subjective judgemental criteria they do enable us to compare the relative gains of pupils within one delivery model as compared to another. More specifically, a question which can be addressed is whether those schools which are rated as having achieved a high degree of implementation of special education provisions are conducive to teachers fulfilling more objectives for pupils, mobilizing more resources and expressing greater satisfaction with special services than those schools rated as achieving only low levels of implementation.

Within this question, further issues can be addressed. Is a high degree of convergence of opinion between teachers and principals about special education policy likely to result in better services for pupils? Is a school delivery model which focuses on preventive activities likely to result in enhanced services for pupils not yet designated as exceptional? Is a school delivery model which subscribes to and practices integration of exceptional pupils into regular classes able to meet the needs of such pupils to a greater extent than a model which subscribes to segregation? What characteristics of teacher preparation and attitude affect such outcomes?

In summary, there are two sets of questions addressed by this study. The first set concerns the effects of the 1980 Education Amendment Act on the school board and school level provisions for special education over a four-year period of implementation. The second set concerns the impact of various delivery models developed in response to the legislation on the classroom practices of teachers dealing with pupils at risk. These pupils include both potential candidates for special education and pupils already designated as exceptional.

1.2 Organization of the Report

This report contains the results collected in the final year of a four-year longitudinal study. It will include the results of gains in implementation over the full four-year period, but it will not contain material previously reported in the August, 1985 and February, 1986 interim reports of the project.

Two major components are included in this report. The first, termed the implementation study, is comprised of interviews conducted with school and board staff in six school boards at one or more times during the four years of the project. From these interviews, personnel were rated on the degree of implementation on five key dimensions.

The second component concerns the impact of changes in implementation on pupils. In four school boards, interviews were conducted with teachers concerning two or more pupils. The interviews were designed to assess the extent to which an appropriate program and services were planned, implemented and monitored for these pupils. Teachers' goals, resources used and teachers' satisfaction with progress were also gauged. This impact component, collected in the second, third and final years of the project, has two purposes. It offers a validation of the implementation ratings described above. It also allows the researchers to assess, independent of the descriptions of implementation, the extent to which pupils were benefiting from the increased services. This assessment of impact is, however, also made through teachers' report, and not by direct measurement of pupils.

There are two products of this research project. One is the developed and refined sets of criteria for rating implementation and impact. These criteria are contained in Appendix A. As will be described below, the criteria are operational definitions of school-based delivery models and impact variables applied to the activities of principals and teachers.

The second product is the result of applying these criteria to our samples of principals and teachers over the four years of the study. They yield four main bodies of data:

1. Longitudinal changes in levels of implementation from 1981-82 to 1985-86.

2. A comparison of levels of implementation between (a) boards, (b) staff groups (principals, resource teachers, regular class teachers, special education class teachers, superintendents, professional resource staff), (c) school types (elementary, secondary/intermediate).

3. Degree of impact of the amendment on classroom practices.

4. The relationships between implementation level of (a) principals, (b) staffs, and (c) the degree of impact on specific pupils.

A summary of these results, and a discussion of their implications are placed near the beginning of the report rather than in the more traditional location in the body of the report. The literature review and method and procedure sections are located in Appendix B, for those readers who wish to examine in depth the mechanics of the project.

Chapter 2

Summary of Results, Discussion and Implications

2.1 Implementation

2.1.1 The Operational Definition of Levels of Implementation

In Appendix A, the detailed criteria are given by which principals' and teachers' interviews were rated on degree of implementation. The operationally defined criteria contain five dimensions of implementation. A dimension is a set of behaviours which are the individual's response to the policy and procedures required by a school board. The dimensions are:

a. Identification. This includes referral and assessment. This dimension deals with the provisions in place for identifying pupils who have not yet been deemed exceptional.

b. Program. This dimension explores the educator's views of responsibilities for programming for pupils both before and after the IPRC.

c. Review and evaluation. Two components are defined in this dimension. These are; the preparation for and conduct of the annual IPRC review meetings, and the procedures for continuous assessment and evaluation of the progress of exceptional pupils.

d. Communication with staff. This dimension addresses the frequency and content of communication concerning exceptional pupils, a) between the principal and staff, and, b) among the staff.

e. Communication with parents. The time of onset, the continuity and the frequency of contact with parents.

Each of these dimensions has four levels of implementation.

The lowest level, 1.0, indicates that the interviewee is not aware of any provisions in that school for that dimension.

Level 2.0, the "token" level describes a level of special education delivery that is in compliance with the Act and regulations, but minimally so. At this rating, school staff focus on confirmation of pupils' problems and on placing pupils at the IPRC according to their category of exceptionality. A pupil's need for specified programs and services is seen as secondary to the identification procedures, and is usually the responsibility of the special education teacher following placement. Program modification and continuous evaluation of progress take place in the special education withdrawal and segregated settings, and are usually not shared with regular classroom teachers, for example, when a pupil is integrated. Pupil progress is considered at IPRC review meetings but is secondary to diagnostic assessment data.

Level 3.0, the "routine" level of implementation indicates a transition from level 1.0 to level 3.0. Interviewees describe the intention to provide a Level 4.0 service, but are not yet doing so formally, or even systematically. Many aspects are left to chance. For example, the special education resource teacher may view the regular class teacher as responsible for parent contact and vice versa.

Level 4.0 is the "full" level of implementation. This level is defined as a view of special education which is preventive in nature, that is, the total school staff is involved in collaborating to ensure that the program needs of pupils, exceptional and otherwise, are met as far as is possible. The principle aspects teachers have demonstrated are; (a) that before a child is referred for formal assessment, prior to an IPRC, several adjustments to program have been tried, and; (b) that resource teachers have consulted with regular teachers in order to monitor

such adjustments and identify the specific programs and services that the child requires. Special education personnel have a role in providing assistance and resources to regular classroom teachers, in planning for and monitoring the progress of non-identified as well as exceptional pupils. Exceptional pupils may be integrated into regular classes for subjects other than music, physical education and art, and when such integration occurs, special education resources are supplied to the regular classroom (or subject teacher) so that the placement is maintained. Special education resources may take the form of an individual teacher who has a mandate to provide direct service to teachers as well as pupils outside the resource room or segregated class. Alternatively the school may have established a team, comprised of the principal or vice-principal, regular teaching staff, and special education resource people. Such a team does not function as an unofficial IPRC, making recommendations for placement, but rather, as a program and service resource for staff.

In the body of the report, the average levels of implementation for various staff groups are reported, using this 4-level scale. For statistical purposes, a 7-point scale was used, since ratings were permitted for midpoints between the 4 levels. Reliability measures are reported in the results section, indicating high levels of consistency among raters.

2.1.2 Summary of Results and Discussion - Implementation

a. Has there been an overall increase in level of implementation of special education policies and procedures between 1982 and 1986?

   The results show that there has been an increase in all sectors of the education system in the six boards studied.

   In 1982, some sectors such as the teaching staff in secondary schools showed little or no implementation of the provisions of the Education Amendment Act (1980). The average level of implementation at the school level on the five dimensions common to principals and teachers ranged from 2.09 to 2.84. As defined above and in Appendix A, a rating of 2.0 is defined in this study as minimum compliance with the Act and regulations.

By 1986, the average ratings had moved higher, ranging from 2.65 to 3.25 (Table 12) with gains of 0.41 to 0.87 of a scale point. Overall this indicates that school personnel were paying greater attention to program needs of pupils. Programming provisions were reflected in the identification procedures in the form of assistance to regular teachers, in attempts to delay problems before referring pupils and in assessments which moved toward curriculum and away from a diagnostic focus. Gains were also seen in the review process as the confirmation of exceptionality became less important and consideration of the effect of the placement on pupil progress increased. The program thrust was also reflected in increases in teachers' awareness of adjusting the program for individual pupils and of monitoring and evaluating the progress of pupils.

However, the increase still fell short of the 4th or highest level of implementation, suggesting that the gains made over the four years of study are not yet complete. While the focus and philosophy of educators is changing, the procedures are still inconsistently and informally conducted, allowing for considerable variation among the staff in a school and between schools in a board.

Clearly, educators had become more conversant with the legislation for special education, and with school board policies and procedures. On the whole, however, school boards translated the legal requirements into broadly stated policies that permitted considerable variation in interpretation from school to school. Some school personnel were able to comply with their board's policies within traditional service delivery models that divided the special education operation of the school from its regular programs, and permitted no sharing of resources or support. Other schools stand out because of the commitment of a "maverick" principal, or a teaching staff who undertake to unite the resources of the school to assist each teacher to meet the needs of all the pupils. These schools are a striking contrast to the majority of schools, in terms of the attitude of the staff to special education.

b. Is there consistency in the implementation beliefs and practices of educators?

A major finding in this study is that educators who score highly on one of the dimensions of implementation also score highly on all other dimensions. The converse is also true, that low ratings were usually consistent across all dimensions. This permits two conclusions; that the rating scales and corresponding operational criteria for the dimensions are reliable and valid, and that educators have systematic perceptions and beliefs about special education delivery that are consistent across all its aspects. The results section (Appendix B2) reports the correlations between dimensions within each of the four interview groups: principals, special education, regular and resource teachers.

c. Are some dimensions of implementation better implemented than others?

There are significant differences between dimensions, with identification and program rated highest, and ongoing evaluation and communication with parents rated lowest. The picture which emerges is that gains have been made overall, with formal procedures receiving most attention, (IPRC referrals, assessments and IPRC reviews, writing and filing an individual program plan). The activities which most reflect attitudes toward program delivery as a primary responsibility are less well implemented. The program design - intervention - evaluation cycle (Reschly, 1978) is poorly understood. The inter-group correlations of the communication dimensions are anomalous. Principals rate considerably higher on them (3.04 and 3.15) than teachers (2.85 and 2.65). Overall, teacher contact with parents is sporadic and incidental to the task of working with the pupils. Principals consider their teaching staff to be more systematic in keeping parents informed and involved. Also, principals see themselves as frequently in contact with their staff, whereas teachers rate their communication with principals as low.

d. Have some dimensions shown greater gains in implementation than others?

Between 1982 and 1986 there have been significant gains among teachers in those dimensions which relate to direct service provided to pupils; identification including referral and assessment procedures, program delivery and ongoing

evaluation. Lower gains are seen in the communication dimensions, communication between principal and staff, and communication with parents.

e. Are there differences in implementation from board to board?

A comparison of the six boards shows differences in patterns across the dimensions of implementation (Figure 1). There is an obvious high ranked and a low ranked board among the six. However, each board demonstrates adequate levels of implementation on one or more dimensions, and, considered together, the boards are not significantly different. All boards showed longitudinal gains on all dimensions with one exception, in which the ratings on two dimensions remained constant.

f. Are there differences in implementation levels and gains in relation to teaching status?

Multivariate analyses of variance and correlational data show that significant differences exist between the four school staff groups (Figure 2). Principals' ratings are significantly higher than the ratings of the three teacher groups. Special education and resource teachers score higher on all dimensions than regular classroom teachers.

This finding could be explained in at least two ways.

i. Implementation beliefs and activities may be disseminated in a hierarchical manner from the principal through the special education personnel on the staff to the regular classroom teachers. This study reports samples taken at two points in time during this process, once at the beginning and again after a three to four-year interval. The final year results may indicate that implementation has filtered down to the regular classroom teachers, as is shown by gains in all groups. This process may be just the beginning of changes to occur in the future. A subsequent sampling conducted three years from now might show that the implementation process has continued, and is demonstrated by further gains in all groups.

ii. Alternatively the results may reflect the relative priority given to special education by each of the staff groups. Principals continue to play a leadership role in setting the priorities for staff, and for the in-school procedures. Special education and resource teachers are relatively well informed about current beliefs and activities in special education. Regular classroom teachers continue to see special education as largely outside their responsibilities. If this is the case, further study conducted three years from now would show relatively little gain.

g. Are there differences in implementation levels and gains between elementary and secondary schools?

Elementary schools have higher ratings on all dimensions than secondary schools. Several of the secondary schools commenced this study with few or no provisions in place for exceptional pupils. By 1986, both panels had shown gains with greater than average gains at the secondary level.

Secondary schools continue to face difficulties in discriminating between program levels and special education. On one hand, educators told us of the difficulties arising from the arrival of pupils designated in the elementary schools as exceptional for whom there were no special education programs at the secondary level. Many exceptional pupils are automatically assigned to basic level programs. On the other hand, secondary teachers often stated that elementary schools over-identified pupils and led them and their parents to expect specialized programs that could not be provided in the high school. Alternatively, elementary schools were accused of failing to identify pupils in the intermediate grades, but held them until they were old enough for high school without paying attention to gaps in basic skills. Teachers feel that they must deal with the pupils for whom insufficient planning has been done for their transition to secondary education. Elementary staffs report difficulties in preparing secondary schools for their pupils, and in passing along relevant information.

h. What relationships exist in the implementation level of principals compared to their staff, and across staff groups?

In theoretical terms, it would have been gratifying to find that the principal dimensions correlated highly with the corresponding dimensions in all of the three staff groups. This would have indicated how important the adoption of a delivery model by a school principal is in terms of influencing the perceptions and activities of the staff members. The results do indicate some degree of correspondence, and a modified conclusion might be drawn. The implementation levels of identification, program and review reported by the principals are reflected in the levels of implementation of special education and resource teachers in the school, and to some extent in those of regular teachers. The philosophy and procedures for those activities which involve the delivery of services directly to pupils appear to be commonly shared by the staff in the school. The degree of communication between the principals and their staff about exceptional pupils, and the level of parental involvement do not appear to relate to the delivery dimensions. High levels of service delivery to pupils do not correlate with the extent of communication between principals and staff, as some of the literature on effective schools and leadership has proposed (Crandall, Eiseman and Louis, 1986). The intention to involve parents in an ongoing way also does not appear to be related to high levels of service delivery to pupils.

2.1.3 Summary of the Implementation Findings

The results indicate that progress has been made in the implementation of special education in all sectors of the school boards studied. This picture is complex, however, and major differences exist between staff groups and even from school to school. The pattern of correlations between principal and teacher variables lends support to the research findings on effective schools (Rosenholtz, 1985) in which principals of "turn-around" inner-city schools are described as follows:

> Principals in these schools have a unitary mission of improved student learning and their actions convey certainty that these goals can be attained. Such actions include...organizationally buffering teachers to ensure that their efforts are devoted to raising student achievement, monitoring the academic progress teachers make, supplying additional technical assistance to needy teachers, and providing - mostly in concert with teaching colleagues - the opportunities to establish strategies to achieved instructional goals. (p.354)

The correlational data and the analyses of variance corroborate the major finding of this study: that the lowest ratings in implementation have occurred in the dimensions related to the provision of programs, their planning and monitoring and the evaluation of their effect. This will be discussed in more detail in the next section of the report dealing with Impact.

2.2 Impact

2.2.1 Operational Definition of Impact Variables

In attempting to assess the impact of Bill 82 implementation practices on teaching performance, it was imperative to consider variables that validly represented aspects of teaching performance that most educators would agree contribute to, or increase the probability of successful learning. It was not the intention of the principal investigators to attribute values to certain teacher behaviour, but to identify and apply dimensions of teaching which are considered to be part of the constellation of procedures termed appropriate instruction. For the purposes of the "Impact" component of this study, the following dimensions were used:

a. *Goal Specificity*. The extent to which a teacher's goals for a student were specific in content and perceivable in terms of learner behaviour. (i.e.: Is there a perceivable instructional objective?)

b. *Goal Relatedness*. This pertains to the relevance or appropriateness of the goals to the nature and type of learning behavioural problems experienced by the student.

c. *Teacher Effort*. The identification of the principles of learning and the teaching practices and strategies that are relevant and necessary to the accomplishment of the instructional goals. (i.e.: What did the teachers do to facilitate learning?)

d. *Effort Relatedness.* The relevance of the teachers' practices to the instructional goals/needs of the student. (i.e.: Is the teaching focused on a particular target, or does it include a little bit of everything?)

e. *Use of Resources.* What resources did the teacher use in order to gather as much information as possible in order to facilitate learning on the part of the students?

f. *Parental Contact.* The nature of the communication established and maintained by teachers and the parents of their students.

g. *Individual Pupil Plan.* Are instructional practices based on a pupil program plan which includes a systematic outline of instructional methodology and sequences?

2.2.2 Goal Specificity and Relatedness

Are teachers' goals specific and perceivable in terms of student behaviour and are they appropriate to the concerns they express for their students?

Analyses of ratings suggest that formal, instructional objectives, characterized by specificity of student performance, and the conditions under which the student would demonstrate that performance, are not yet part of teacher instructional repertoire. While some increased awareness of the importance of programming elements was noted in the interaction component of the study, the transformation of awareness to in-class practice has not yet occurred. The vague, general objectives established by teachers do, for the most part, broadly encompass the student's needs implicit in the concerns expressed by the teachers. However, in approximately one third of the cases no goals were expressed to meet particular concerns, and in another one third of the cases goals were stated with reference to concerns that had not been expressed. These results may be part of the problem inherent in using teachers' reports of their methods and practices, rather than using direct observation of teacher practices.
Teachers may know and do much more than they report.

2.2.3 Teacher Effort and I.P.P. (Identification, Placement, Programming)

What do teachers do to facilitate the meeting of their objectives? The low mean ratings of teacher effort (regular teacher, 2.24; resource teacher, 2.45 and special education teachers, 2.57) reflect the general, unfocused nature of their instructional approaches. The teachers' approaches are characterized by minimal instructional involvement with students; a propensity to transfer the responsibility to others by referring students to special education or resource personnel; implementation of pre-packaged materials and lack of a systematic plan for evaluation. The relatively low number (67%) of formal individual pupil plans available for students designated as exceptional supports the overall impression that individually tailored programming is by and large poorly done. Programming is secondary to Identification and Placement. This suggests that teachers in all three groups are unaware of the fact that appropriate, effective instruction, and successful learning are based on the design and systematic implementation of a teaching blueprint which includes specific teaching approaches, content, strategies, reinforcement or feedback procedures, evaluation and provisions for program modification. Or, if they are aware of the above, they are not familiar with the techniques of generating task and process analyses from instructional objectives.

2.2.4 Use of Resources - In School

2.2.4.1 Principal/Vice-Principal

The results pertaining to teacher contact with the principal strongly indicate that such interaction on behalf of students is limited largely to the formalities associated with referral to an IPRC or to informing the principal of the teacher's concern about a student. Overall, teachers do not appear to perceive the principal as a resource person with whom one can discuss

issues of goal setting, program design and strategies of implementation. Therefore, teachers do not approach principals with this type of consultation in mind. By the same token, principals do not appear to take any initiative by offering suggestions with regard to these issues or by requesting a periodic updating on how the student is progressing. Consequently, few teachers indicated that they found their contacts with their principal to be more than moderately useful.

While there appears to have been a change in implementation over the period of the research, at least in terms of principal reporting, the principals' philosophy and practices have, as yet, not found their expression in an active interest or involvement in directly assisting teachers with their responsibilities *vis-a-vis* their students who are experiencing academic and/or behavioural problems. In other words, a major characteristic of effective schools - ongoing exchange of information and involvement of the principal in all aspects of the school program that results in the establishment and maintenance of a positive climate and which enhances student learning - is missing in the vast majority of schools participating in the study.

2.2.4.2 Peers

Collegial interaction and communication is a common pattern in all of the schools studied. Teachers appear to see the value of collegial resource assistance and very readily approach other teachers for a sharing of ideas with reference to programming materials, and particular strategies for particular types of children or problems. Such consultations are not only part of formal resource team meetings, but occur on an ongoing informal basis as the need arises. The consultations occur both within and across teacher groups and are considered to be a useful avenue for solving student-oriented problems.

Peer consultation takes on particular importance and value for the teachers in the light of results pertaining to the nature of their consultation with principals and with school board resource personnel.

2.2.4.3 Board Resources

All three groups of teachers reported low frequencies of contact with the wide variety of resource consultants available in all but one of the boards. While teachers perceive these resource consultants to have active roles in the pre IPRC and IPRC procedures, they do not consider these resource personnel to be sources of relevant or useful information in terms of assisting the teacher to either better understand the needs of particular students, or to more effectively meet those needs. The concerns expressed with regard to the resource consultants were in terms of the large delay between the teacher's request for assistance and the appearance of the consultant in the school, the relatively general nature of the suggestions made by the consultant and the lack of follow-up contacts. These concerns are not recent, they were reported by teachers in Year I of the study. This suggests that little, if anything, has changed since the inception of the study in terms of the ways in which resource consultants provide their service to teachers, and in terms of the teachers' perception of the usefulness of that service. A potentially valuable source of insight, experience and skill is still essentially lost to the teachers in the boards in question.

2.2.5 Summary

If teachers' instructional skills as they relate to the establishment of instructional objectives, program design and implementation, and ongoing evaluation are to be enhanced, it may require a concerted effort in providing in-service programs for teachers and principals, and acceptance of the consultative role to be played by resource personnel. As stated earlier, the sampling of schools in 1986 showed that progress has been made in this as in all other dimensions of special education delivery. On the one hand, several years from now gains in program efficacy may have occurred as a result of gradual and continuing progress toward implementation. On the other hand, legislators and administrators will have to judge for themselves whether a new impetus is required to ensure that programming needs are met. The

form that such an impetus might take can only be speculated: legal, professional, financial, or political. If the progress made to date is an indication, legislation has the effect of raising awareness and organizing resource priorities.

2.3 Examples of Innovative Delivery Models

2.3.1 Large Elementary School

The teachers elected to disband an intermediate behavioural class and to split the pupils among their six regular classrooms. In turn, the behaviour class teacher was put in charge of a regular class, which resulted in a lower pupil-teacher ratio across all the intermediate division. This teacher supplied resource support in regularly scheduled meetings to the regular class teachers in whose classes the exceptional students were integrated.

2.3.2 Small Elementary School

This school was too small to qualify for a resource teacher under the board's staffing formula, so the special education teachers consulted regular class teachers about potentially exceptional pupils in the afternoons when their own pupils were integrated. The outcome of the consultations was to prescribe individual tutoring to some pupils, given by the regular school staff during one of their weekly spare periods. A tutor roster was established in the school to ensure that each teacher had to give up a minimum number of spare periods. This school had reduced its total number of exceptional pupils, and had cut in half the annual number of IPRC meetings.

2.3.3 Secondary School

In a secondary school, the special education resource unit was available for pupils who wanted extra help, or to subject teachers who wished to refer pupils. In order to reduce the stigma associated with needing special help, pupils received a yellow note with an appointment time from their home-room teacher during daily opening exercises, at a time when many pupils receive such "yellow slips" for a variety of school activities. The appointments are set up by the resource staff in consultation with the subject teachers, so that program goals and content can be designed to match the subject teacher's curriculum, and can be conducted at the same time as the regular class. However, the scheduling is staggered so that a pupil takes the majority of any subject with the subject teacher. The pupils, exceptional and otherwise, can receive help in the resource room to meet instructional goals, write examinations and to develop academic and study skills that are congruent with the subject teacher's goals and concerns for the pupil. Regular meeting times are scheduled for subject and resource teachers in order to negotiate modifications to program and evaluation, and to design supplementary instruction. After trying this for basic level credits, the school is now offering resource help for general and advanced subjects.

Bibliography

Bickel, W. E., and Bickel, D. D. (1986). Effective Schools, Classrooms, and Instruction: Implications for Special Education. *Exceptional Children, 52* (6).

Carlberg C., and Kavale, K. (1980). The efficacy of special vs. regular class placement for exceptional children: a meta-analysis. *Journal of Special Education, 14*, 295-309.

Crandall, D. P.; Eiseman, J. W.; and Louis, K. S. (1986) Strategic planning that bears on the success of school improvement efforts. *Educational Administration Quarterly, 22*, 3, 21-53.

Crealock, C.; Sitko, M.; and Allison, P. (1985). *The Bill 82 Implementation Study. Final Report 1982-1985.* Ontario: Ontario Institute for Studies in Education.

Fullan, M. (1985). Change Process and Strategies at the Local Level. *The Elementary School Journal, 85*,(3), 390-421.

Hobbs, N. (Ed.) (1975). *Issues in the classification of children.* San Francisco: Jossey Bass.

Howart, M. (1983). *A search of the literature on mainstreaming.* Toronto: Federation of Women Teachers Associations of Ontario.

Knight, M.; Meyers, H.; Paolucci-Whitcomb; P., Hasazi, S.; and Nevin, A. (1981). A four-year evaluation of consulting teacher service. *Behavioral Disorders, 6*, 92-100.

Leinhardt, G.; Zigmond, N.; and Cooley, W. W. (1981). Reading instruction and its effects. *American Educational Research Journal, 18*,(3).

Miller, T. L., and Sabatino, D. A. (1978). An evaluation of the teacher consultant model as an approach to mainstreaming. *Exceptional Children*, October, 86-91.

Nelson, M. C., and Greenough, K. N. (1984). The case for noncategorical educational programming for behaviorally disordered children and youth. *B.C. Journal of Special Education, 8*, 107-121.

Reschly, D. J. (1980). Non-biased assessment. In E. Phye and D. J. Reschly (Eds) *School Psychology*. New York: Academic Press.

Rosenholtz, Susan J. (1985). Effective Schools: Interpreting the Evidence. *American Journal of Education* (May).

Sarason, S., and Doris, J. (1979). *Educational handicap, public policy and social history*. New York: Academic Press.

Speece, D. L., and Mandel, C. J. (1980). Resource room support services for regular teachers. *Learning Disabilities Quarterly, 3*, 49-54.

Stainback, W., and Stainback, S. (1985). A rationale for the merger of special and regular education. *Exceptional Children, 51,* (2), 102-111.

Stallings, J., and Mohlman, G. (1981). *School policy, leadership style, teacher change, and student behavior in eight high schools.* (Final Report). Washington, DC: National Institute of Education.

Strain, P., and Kerr, M. M. (1981). *Mainstreaming of children in schools: Research and pragmatic issues.* Toronto: Academic Press.

Wilson, A. K. (1983). *Opening the door: The key to resource models.* Toronto: Ontario Public School Teachers' Federation.

Ysseldyke, J. E. and Algozzine, B. (1982). *Critical issues in special and remedial education.* Boston: Houghton Mifflin Co.

APPENDIX A

A1) **Criteria For Rating The Principal Profile**

A2) **Criteria For Rating The Teacher Profile**

A3) **Impact Variables Rating Scale**

APPENDIX A1

A1) CRITERIA FOR RATING THE PRINCIPAL PROFILE

1. Identification Including Assessment and Referral

   a. Non-implementation

      No identification taking place.

   b. Token Implementation

      Parents involved the first time for formal consents for assessments through the principal's office.

      Identification infrequent, little or no interventions before formal referral.

      Principal informed of process, but not directly involved, or if involved, for formal consent and IPRC scheduling.

      Principal understand IPRC procedures to be the primary method of dealing with problem pupils.

      The role of the teacher is to refer for assessment.

      Little resource help given to regular teacher - withdrawal is the usual prereferral route.

   c. Routine Implementation

      Parents alerted to child's difficulties by the classroom or special education teacher, but no systematic procedures for parent involvement. The principal usually considers that it's the teachers' job to keep the parents informed, but no follow-up is done.

      Identification is routed through the school team, on which the principal sits, or to the resource teacher to bring to the attention of the principal.

The principal expects teachers to have attempted some program adjustments prior to referral for formal assessment and to be able to comment on their outcome. However programming adjustments may be tried only once and if unsuccessful are not further developed.

Emphasis on completion of process, especially documentation.

Assessments are routine and all referred pupils get a similar assessment package.

Interventions before referral are focused on assessing child's current status as a learner rather than trying alternative programming strategies to see if problem can be solved in class.

d. Full Implementation

Principal systematically alerts parents to child's difficulties and invites them to participate early in the identification and prereferral process. Parents made aware have opportunity to be involved in program modification in regular class. Contact is the responsibility of teachers but is systematic and not left to chance; is part of the role of both regular and special education teachers and is an ongoing contact.

Initial interventions involve principal and a number of attempts before formal referral. Program modification tried before formal referral. Principal will expect full description of program modifications attempted and teachers' beliefs about childs' learning and behavioural difficulties in benefiting from program. Programming adjustments that are unsuccessful lead to a search for further programming alternatives that may eventually lead to formal referral.

Assessments widely based and case-specific, focused on learning needs.

Principal conversant with IPRC, its members and procedures.

2. Program Planning and Objectives

a. Non-implementation

Apparently no objectives. No integration of exceptional students.

b. Token implementation

Teachers plan and monitor program without aid or supervision.

Objectives limited and unclear, very general in nature without specific strategies.

Teachers not expected to modify program goals or techniques to accommodate integrated or prereferral pupils, except to lower expectations of pupils' performance.

Principal sees integration as beneficial for social and self-concept of pupil, but not for academic development.

At the high school level, an open credit system, but no individual assistance or support for choice of student. Principal sees integration as the right to attend classes, but does not expect program adjustments to happen within class.

c. Routine implementation

Principal expects programs to be adjusted, but does not require evidence of individual program planning. Teacher should be aware of external recommendations and of the viability of modifying program, but usually accommodates differences through groupings that use discrete sets of learning resources. There is some flexibility in the program but it is not linked to specific objectives and to subsequent evaluation of progress.

Specific objectives of a short-term nature are usually in evidence for individual children, but are usually components of long-range goal planning only when a child presents serious management or social difficulties.

May expect program resources (e.g. board's team/consultants) to deal with program adjustment.

d. Full implementation

Planning involves several levels of expertise, carefully reviewed.

Objectives relate to student needs, teacher development and have specific time frames and strategies for implementation.

Identification routed through principal and resource network and/or team. Decision making focused on programming needs.

3. Reviewing Student Placement and Progress

a. Non-implementation

Principal keeps no records on special students and does not see them, except those referred for discipline.

Reviews held annually - many pupils covered in several hours.

Decisions made only for placement; progress and program not considered.

Decisions made on basis of age or IQ test data or designation.

b. Token implementation

Review meetings as required by law.

Principal keeps no personal notes outside of OSR and official documents, except perhaps for discipline problem pupils.

Principal comes into contact with special students usually only through discipline.

Decision still based on whether student is still of the designation that merits continued placement, e.g. appropriate deficit.

At annual reviews, each case considered individually, but briefly and standardized test data is main criteria.

c. Routine implementation

Principal keeps notes of all meetings pertaining to special students and keeps track of particularly difficult students' progress.

Comes into contact with special students only when problems arise or reviews are imminent.

Reviews held often enough to satisfy legal requirements.

Focus on whether student is progressing in program and placement - no routine analysis of objectives for program and their outcome.

Test data and progress considered.

Decision based on whether placement is still appropriate, but progress may be part of information used to reach decision.

d. Full implementation

Reviews held regularly involving thorough analysis of student progress-review meetings scheduled in accordance with programming goals.

Principal keeps own notes on special students.

Makes effort to know every special student and to see them all regularly.

Decision based on whether program meeting needs of student and how to improve it. Any changes of designation or placement are based on increasing pupils' opportunity to learn/grow/develop/behave.

4. Delivery Model Modification and Implementation Including Professional Development

a) Implementation

Delivery model ranges from purely restorative to fully preventative. Restorative (Level 2) includes labelling, identifying deficit, formal referral and getting pupil out of the regular program as soon as possible. Preventative (Level 4) includes all attempts to modify program and referral only when these attempts have been unsuccessful. Regular program proven to be unable to meet the needs of the child before formal referral occurs. Focus is on finding the best possible alternative program. It is a cycle of objectives leading to programming leading to evaluation focused on individual needs of child.

a. Non-implementation

Children routed directly to IPRC, with resources external to the school viewed as carrying the responsibility.

Apparently no attempt to develop special education procedures in the school.

Principal has no articulated delivery model and no plans to develop one in the school.

b. Token implementation (Restorative)

Principal aware of the provisions of Bill 82 and has minimally met the requirements.

Pupils are identified, IPRC'd and placed in segregated or withdrawal programs.

"Integration" of special students limited to recess, lunch, music and phys. ed., on group criteria.

Little or no prereferral and programming procedures unless teacher initiates them.

Few modifications to develop procedures in the school in a fundamentally traditional program.

Principal consults with other staff members infrequently on issues of special education.

Special education is not a priority except in terms of increased staffing.

c. Routine implementation

Principal had developed special education procedures in conjunction with his staff.

Formal procedures to route pupils are in place; emphasis on routing and standard procedures. However, procedures include some prereferral consultation between special and regular teachers and parents.

Integration of special students by group or class on an administrative formula.

d. Full implementation

Implementation is shared with others in the school through a variety of formal and informal methods - committees, team, etc.

The school staff subscribes to a model of prevention. Emphasis is placed on the special education staff and principal assisting the regular teacher to maintain the pupil in the regular class.

An heterogeneous system of provisions, room for variation, but all with a well understood set of procedures and routing.

Integration of special students arranged according to individual strengths and needs, and supported by careful planning.

Time is allocated for case conferencing within the school timetable and job descriptions.

5. Communication

a) Professional development and communication with staff

a. Non-implementation

No professional development in school at all on Bill 82, or board plan or principal's model.

No joint planning with staff.

b. Token implementation

Principal informs teachers of professional development events and gives input to system PD as required to do so.

Staff learn of Bill 82 from board professional development only and not through principal's own initiatives.

Principal has not given priority to co-ordinating professional development activities between regular and special education staff.

c. Routine implementation

Principal assesses PD needs in school and arranges some events in the school on Bill 82.

Principal has a clear-cut focus of school model and has given some priority to working with staff on the model including co-ordinating PD activities to enhance model.

d. Full implementation

Principal assesses PD needs in the school and seeks out ways of meeting these needs by use of committees, meetings and joint planning.

Principal supports teachers going to conferences, provides substitutes, funding, etc.

Principal has given priority to prevention model, training of staff in identification, in program skills, individual program development, consulting between special and regular staff.

6. Parents

a. Non-implementation

Principal avoids parent involvement, if possible. For formal consents/consultations, he may use a third party (e.g. school secretary, teacher).

b. Token implementation

Parents contacted for permission, information, for formal consents only. This is usually the first contact made by the principal and the first formal contact by the school. (Teachers may have spoken to parents, but not on record.)

c. Routine implementation

Parents contacted before the IPRC, formal referrals and consents.

Principal sees teachers as responsible and trusts them to carry out this role but doesn't ensure that it's been done.

Principal is available for difficult parent interviews.

d. Full implementation

Communication with parents is relatively frequent using a variety of channels as appropriate.

Principal insists that parents be contacted early and frequently; ensures that this is done and is usually directly involved. Parents are aware of and often party to the decisions to formally refer their child for assessment having been involved in pre-referral activities.

7. Evaluation of Services

a. Non-implementation

No evaluation of school's model or of effect of special education on pupils/staff is being done or planned by principal.

b. Token implementation

Intuitive evaluation of procedures and delivery methods only.

Principal reports that (s)he can judge from his/her involvement.

If goals were set in 1982-83, they were only informally followed up by principal, if at all.

c. Routine implementation

Procedures checked regularly for efficiency.

Goals set in Year 1 were evaluated according to intuitive criteria but the goals are still appropriate and were followed through.

Some informal feedback from staff sought.

d. Full implementation

Procedures evaluated constantly and updated or amended.

Objectives evaluated according to specific criteria set at the beginning.

Principal maintains an ongoing evaluation according to both intuitive and objective criteria which may include feedback from staff on a regular basis, e.g. about number of referrals, efficacy of program, etc., to determine the effect of the school's model. Committees may have been struck for this purpose.

Principal's goals include developing the model, increasing programming skills and teacher attitudes.

APPENDIX A2

A2) CRITERIA FOR RATING THE TEACHER PROFILE

A. Identification, Including Referral and Assessment (Pre-IPRC)

1. Non-implementation

a. Regular Class Teacher

The teacher does not refer to or consult with other staff about a student experiencing difficulties with the regular program, either because (s)he is unaware of legal/board/school policies and procedures, because systems are not in place to correct non-identification, or because the teacher disagrees with using (or refuses to use) resources and programs related to special education. The teacher generally perceives the classroom as a self-sufficient independent entity sufficient to meet the educational needs of all students. No assessment of individual needs is made.

b. Special Education Teachers

No criteria.

c. Resource Teacher

Teacher works with a group of previously-identified pupils on a withdrawal basis. No new cases are added except by expediency (e.g. principal or parent so request). No provisions are made for re-integrating children on the current case load. No assessments done.

2. Token Implementation

Criterion-restorative: problem pupils are the responsibility of special educators only, once identified as severe enough to qualify.

a. Regular Teachers

The teacher refers or consults about a student experiencing difficulties in the regular program. The identification of exceptionality means responsibility will be removed for educating the pupil. Does not do own assessment of needs. Referral to resource alleviates all responsibility for further action.

b. Special Education Teacher

The teacher has no data when child is placed and waits for school psychologist and/or educational consultant to provide assessment data before program is begun. The teacher conducts assessments for reviews for the purpose of confirming the identification and category of exceptionality, but does not identify the pupil's learning characteristics or program goals.

c. Resource Teacher

Teacher may be involved in in-school teams or informal consultation meetings, but purpose and role is to prepare paper-based assessments to confirm identification of problem, to be used by IPRC or review committees. Pre-referral program modification in the regular classroom is not undertaken. Some withdrawal teaching may be given as a stop-gap between referral and IPRC meeting, but not planned to prevent the problem or to add to assessment data.

Teacher views identification as spotting high-risk pupils in order to prescribe an out-of-class intervention.

3. Routine Implementation

Criteria - Procedures for prereferral intervention in place but episodic rather than systematic; procedures tend to be activated when pupil's needs become acute, and will vary from teacher to teacher, often depending on teacher's personal relationship with

resource staff. Procedures tend to be fragmented across staff rather than collaborative and consensus-based.

a. Regular Teachers

Teacher views his/her responsibility as the adjustment of program and provision of additional help prior to requests for formal referral. Teacher's knowledge of pupil is integral to prereferral and referral procedures, but is in his/her head; not systematically collected or documented. Teacher is aware of the role of in-school resources and works with them, informally and episodically. The teacher brings information about the pupil's behaviour/adjustment/learning progress to the prereferral and IPRC meetings.

b. Special Education Teacher

Teacher may be called up to consult with regular and/or resource teachers, but not a regularly-scheduled mechanism. Teacher called upon if perceived to have a specialized knowledge, e.g., about a category of exceptionality, but not an integral part of an in-school support system.

c. Resource Teacher

Works with regular teachers in attempting to solve pupil's problems, supplies program ideas, assessment resources to teachers, but does so on a "catch as catch can" basis in hallways, staff room etc., not in regularly schedules meetings, release time. Major part of teacher's task is (a) to conduct informal/achievement assessments and in-class observations to prepare the referral file on a pupil, and (b) to withdraw pupils for remedial instructions, with loosely-structured contact with regular teacher's goal and curriculum.

4. Full Implementation

Criteria - Preventive, consultative and collaborative sharing of responsibility, teacher aware of goal to reduce IPRC referrals, prevent pupil's problems by early intervention

and support the integration of those returning to regular programs. Systematic procedures, largely team-based.

a. Regular Teacher

Teacher views pupil difficulties as responsibility to be shared with resources, to achieve early intervention and solution.

The teacher is fully aware of the range of resources and procedures available within the school and board to identify and place students. A variety of prereferral assessments, within the classroom and/or in response to advisement/consultation, are utilized to ascertain in-depth educational profiles and to test/reflect upon the appropriateness of current placement. The teacher devises, tries and documents a number of program adjustments and calls for support services before finally deciding to refer a pupil. When referral occurs the teacher documents prereferral teaching activities, observations of the pupil's strengths, learning characteristics as well as difficulties. The teacher is aware of, and a regular participant in, identification and placement meetings - both IPRC and Review - and fully exploits in-school resources and learns where such exist.

b. Special Education Teacher

At the prereferral stages, special education teachers systematically offer consultation to regular/resource teachers, through either regular in-school team meetings or directly. The resource or regular staff teacher plays an integral role in planning then monitoring re-integration programs for partially or fully integrated exceptional pupils from his/her class, and is prepared to step in when problems arise.

c. Resource Teacher

A large proportion of the teacher's time is committed to working with fellow staff in a prevention mode. Teacher is responsible for developing consultative meetings, for liaison between regular and resource staff, for planning and

monitoring prereferral and re-integration programs. Assessments are exclusively program-based.

Teacher may conduct staff in-service sessions to further his/her role, to acquaint staff with new concepts and techniques. Collective goal is to enhance the prereferral process in order to reduce IPRCs, and to successfully integrate exceptional pupils.

Bi) PROGRAM-PREREFERRAL

a) Regular Class Teachers and b) Special Education Teachers

1. Non-Implementation

Teacher is aware only that child is not progressing in regular program. Teacher may not be able to articulate pupil's specific skill area deficiencies because of a lack of his/her own attempts to assess pupil's needs. Teacher is also unable to give examples of individual instructional objectives, and expresses antipathy, rejection or indifference to the concept of program modification. In practice program modification is not attempted. Responses to student needs are usually conventional and restricted to what is presently possible within the constraints of the regular classroom.

Placement in a segregated setting is seen as the preferred course of action except where resource withdrawal can be arranged and these placements are understood by the teacher to be how program modification occurs.

2. Token Implementation - Regular Class Teacher

Teacher may occasionally formulate short-term instructional goals but these are general, non-specific and non-time limited objectives. These goals are established haphazardly or episodically rather than systematically and tend not to be recorded and updated.

Resource withdrawal is seen as a vehicle for program modification being made to the program itself, in which expectations are lowered rather than alterations being made to

the program itself. Typically, there is no linkage or continuity between the classroom program and the resource withdrawal program. Regular teacher may communicate or consult with resource teacher, but there is no shared responsibility for program modification and implementation. Teacher sees this as responsibility of resource teachers.

3. Routine Implementation

Specific as well as general long-range instructional objectives are in evidence, but these are not broken down into a sequential series of short term goals associated with specific criteria or performance. The teacher is usually alert to the needs of the child, seeks and is open to suggestions from resource personnel, but the teacher's approach is general, haphazard, unsystematic and lacks effective monitoring. Goals, criteria, program elements and performance are not monitored and updated on a regular basis and virtually remain the same during the year regardless of whether the goals have been met or not.

Some grouping of pupils may be in evidence, but these groupings are largely static.

4. Full Implementation

The teacher subscribes to a fully individualized process in which specific instructional objective setting, program modification and evaluation is followed. Documented specific short-term goals and associated performance criteria are usually in evidence for individual pupils, as components of long-range planning. These are monitored and updated based on a process of ongoing assessment and evaluation. Teacher utilizes a variety of class groupings including full class, small group and individual and is alert to the need to shift children from group to group as their progress warrants. Selection of teaching techniques and strategies are determined by the teacher's assessment of instructional needs and are adjusted on the basis of pupil achievement. A variety of teaching approaches, strategies, content is attempted by the teacher to determine the most effective way of teaching a particular child.

Teacher utilizes external resources to obtain feedback, support and problem solving on an ongoing basis.

Formal referral is the last resort after all other avenues of approach to a pupil have been exhausted.

Bii)PROGRAM-POSTPLACEMENT

a)Regular Class Teachers and b) Special Education Teachers

1. Non-Implementation

The teacher is unaware of any verbal or written program recommendations emanating from the IPRC or review and/or fails to act on such recommendations (including school team recommendations). Absence of externally generated recommendations about program is not compensated for by teacher initiative in articulating program goals. No distinction is made between general curricula content for the class and the content taught to individual students with particular needs.

(see also prereferral criteria)

2. Token Implementation

The teacher is usually aware of recommendations emanating from in-school, IPRC and review meetings, although there is no perceived connection between these recommendations and the need to construct a detailed instructional program consisting of teaching elements, goals, evaluation procedures, etc. An Individual Pupil Plan may be available but it is seen as part of the necessary paper work rather than as an operational instructional program that is to be systematically implemented. Pupils located under the responsibility of other teachers (e.g. in withdrawal/integrated settings) are seen as outside this teacher's responsibility for planning, objective setting, evaluation.

(see also prereferral criteria)

3. Routine Imp'ementation

The teacher is aware of external recommendations and of the viability of modifying program for pupils, but usually accommodates differences through groupings that use discreet sets of learning resources rather than via individualization. Typically, three groups are established and any pupil must fit one of the groups. There is some program flexibility but it is not linked to specific objectives for particular pupils and the subsequent evaluation of individual pupil progress. Works informally, unsystematically, with special (regular) class teachers in planning goals and evaluating progress for integrated pupils.

(see also prereferral criteria)

4. Full Implementation

The teacher is aware of external program recommendations, and after conducting periodic in-class assessments, gauges their continued relevance and supplements overly general recommendations with his/her own specific program objectives, techniques and strategies. Frequent monitoring of program objectives leads to modifications and/or update of specific objectives.

(see also prereferral criteria)

Biii) PROGRAM-PREREFERRAL

c) Resource Teacher

1. Non-Implementation

Does not see self as involved in prereferral activities that are concerned with assisting regular class teacher to draft and implement program modifications for individual pupils.

Sees role as one of: (a) assisting regular class teacher to prepare for IPRC (gathering together of information); (b) providing testing support for IPRC; (C) Providing

consultation re programming for teacher after IPRC placement decision has been made; (d) withdrawal instruction (without reference to regular class curriculum).

2. Token Implementation

Feels program modifications should only follow an IPRC meeting but will accommodate the regular classroom teacher's request for prereferral program assistance when requested to do so. Recommendations are vague and general rather than specific in nature and are not tied into a systematic, sequential program of objectives and performance evaluation criteria.

Consultation with teachers is episodic with little follow-up as to relevance and/or effectiveness of recommendations.

3. Routine Implementation

Believes in preventive approach and is actively involved in consulting with teachers with reference to the instructional needs of individual children. However, consultation takes the form of providing materials, general instructional strategies or insights into the needs of a particular child. Resource teacher does not systematically engage in co-operative program planning with teacher or indirect and ongoing monitoring of individual pupil progress. No mechanism in place for periodic evaluation of pupils' progress.

4. Full Implementation

Provides full consultation service characterized by sharing of relevant ideas and materials, co-operative assessment of pupils, direct involvement with the teacher in program planning, implementation, monitoring and evaluation. Involved in model teaching, team teaching and/or taking small groups of children for special instructional purposes.

Biv)PROGRAM-POST PLACEMENT

c) Resource Teacher

1. Non-Implementation

   -non-accessible

   -infrequent visits to classroom

   -provision of superficial, general and/or non-relevant information to teacher, if any

2. Token Implementation

   Following IPRC placement decision responds quickly to teacher request. However, characteristics of consultation as per prereferral criteria.

3. Routine Implementation

   Same as prereferral criteria.

4. Full Implementation

   See prereferral criteria.

C. REVIEW-INCLUDING 1) IPC REVIEWS AND 2) ONGOING EVALUATION & CONTINUOUS ASSESSMENT

1. Non-implementation

   a. Regular Teacher

      - No input at IPRC reviews on progress of integrated exceptional pupils.

      - Decisions to promote or repeat, grant credit or fail are seen as sufficient criteria for monitoring. Progress information is not used diagnostically or prescriptively, but is part of standardized evaluation of all pupils in class.

   b. Special Education and c) Resource Teachers

      - No input at IPRC reviews, except forms containing standardized test scores, data to confirm decisions such as suitability of categorical label, admission to basic level program.

      - No criteria recorded for individual pupil progress, and no evaluation takes place except for report cards, and total group or class evaluation.

2. Token Implementation

   a. Regular and b) Special Education and c) Resource Teachers

      - Teacher attends IPRC review and/or presents progress report of pupil, but general objectives given little consideration. Sees role as minor, additional to main psychological data.

      - Evaluation criteria are rarely recorded - consists of informal principles such as "lowering expectations", "showing some effort", "feeling good about selves". Evaluation criteria may be both the objective and the method - "I talked to him about his attitude". Little link to curricular or socio-emotional criteria which are tangible, sequential. Monitoring data consists of class-administered standardized test scores and marks only.

3. Routine Implementation

a. All Teachers

- IPRC Reviews. More attention paid to individual pupil progress. Teachers' input is focal but may be impressionistic rather than well documented. If goals set at beginning of year were not reached, little or no modification occurred to this point. If goals were reached, no documented update and setting of new goals in sequential manner up to this point.

- Ongoing Evaluation. Range of progress information kept: formal, anecdotal, work samples, teachers' logs. Evaluative criteria set at beginning of year, but possibly filed and not updated. After complying with documentation requirements, teacher tends to rely on "knowledge of the pupil" for balance of year.

4. Full Implementation

a. All Teachers

- IPRC Review. Review takes place as needs of pupil dictate; teacher regards continuous monitoring as an important part of program planning and has documentation in a variety of forms. Focus of review is to ascertain suitability of program achievement and update of goals, add further services. Program in integrated setting is reviewed as part of total program.

  Teachers (regular, resource, special education) collaborate in preparing for review by pooling knowledge of child's progress, and see this information as central to review decisions.

- Evaluation. Evaluative criteria are specified, and, as with evaluative methods, may vary from student to student. When goals are reached, new ones are designed to replace them, to further pupil progress. When goals

are not achieved within reasonable time periods, they are reviewed and modified. Continuous linkage between program and evaluation is maintained. Others' expertise or knowledge of the student is frequently sought, and the teacher ensures that relevant others are kept informed of student progress on an ongoing basis.

D. COMMUNICATION

1. Non-Implementation

a. All Teachers

i. Staff

The teacher does not communicate formally and/or informally with co-teachers or principal about integrated exceptional children or problems. the teacher's contacts with school board personnel beyond his/her school are generally through required P.D. or in-service activities. The teacher has no contact with or knowledge about the availability of or involvement of external agencies that could act as resource support to teachers, students or parents. Counselling of students, formally or informally, is regarded as extraneous to the teacher's role, and communication with students is confined to achievement and curriculum-related matters.

ii. Parents

Teachers report via report cards, on required parent interview nights or at other system-imposed reporting times. Counselling of parents does not occur, and teacher-parent contact occurs only at regular reporting times, or in response to student behaviour problems. Reporting to parents about exceptional pupils is seen to be the task of a special education teacher, or someone else.

2. Token Implementation

i. Staff

The teacher unsystematically seeks out, or responds to, formal and informal communication regarding special education students with other staff in the school or the principal when a classroom management or serious student problem arises. The teacher's contact with board personnel beyond his/her school may occur from time to time at P.D. functions, when program or other consultants initiate contact, or at case conferences, IPRCs and reviews. The teacher is aware of educationally relevant agency involvement, but generally perceives liaison as extraneous to his/her role, and assumes that other staff members perform this function if required. Communication with students excludes informal or formal counselling, but the teacher may provide the student with achievement-oriented and curriculum-based encouragement or guidance. The teacher may refer a student to the appropriate school service or individual should the student indicate serious personal problems. While the teacher will not monitor or follow up on the referral suggestion, (s)he will provide relevant information to other staff if such is requested.

ii. Parents

Teacher-parent contact occurs at regular reporting times, is initiated in response to serious behaviour/disciplinary or achievement problems, and may, for short periods of time, be followed by more intense contact until the problem is resolved. IPRC reviews are seen as appropriate time to update parents on pupil progress. No joint planning or pupil reports when various staff involved in a child's program.

3. Routine Implementation

i. Staff

The teacher communicates at regular but infrequent intervals with the appropriate school staff, including the principal, concerning the progress of exceptional students in his/her class. The teacher initiates more frequent contact with school staff if presented with serious student-related or program problems, and is responsive to suggestions for further contact with board personnel beyond the school. The teacher is aware of (school-related) agency involvement, and is receptive to maintaining occasional contact or performing occasional liaison duties where appropriate. Informal and formal student counselling may occur with a number of students, and if the teacher is aware that the nature of counselling required is beyond his/her expertise and function, will encourage students to self-refer, or will initiate a referral when necessary. The teacher's communications with students may include achievement and curriculum-related matters as well as disciplinary, emotional health or personal concerns the student has raised.

ii. Parents

Parents are generally kept informed of student progress by notes home, phone calls in addition to required reporting. Resource, special education and regular teachers may meet together to pool their knowledge of the pupil, either before the parent meeting or in order to meet collectively with the parents, but this occurs on request. Otherwise parents may have to seek information from all concerned teachers in order to get a total picture.

4. Full Implementation

i. Staff

The teacher communicates frequently with the relevant school and staff principal concerning the exceptional students in his/her class, and

supplements formal exchanges of information with informal opportunities to obtain and receive information of relevance to the child's program or well-being. Staff engage in joint goal setting, act as team members in sharing the responsibility for pupils. Contact with relevant board personnel beyond the school is sought out in a variety of areas, including program/curriculum, speech/hearing, physical education, and Public Health Nurse. This communication is directed not only towards solving problems related to individual students, but also to gather ideas, suggestions and new materials in areas in which a teacher judges him/herself to be either weak or particularly interested. The teacher is knowledgeable about the range of external agency and external supports available to teachers, students and parents, and makes use of, refers to, or arranges for referral when appropriate. Feedback to students occurs at regular and frequent intervals.

ii. Parents

Parental contact is perceived as an important priority, and is conducted on a continuous and ongoing basis for all parents. Parent meetings include involving parents in goals, their implementation and in monitoring progress toward attaining them. Staff members (regular, resource and special education teachers) pool their knowledge of the pupil as part of their ongoing monitoring, and share in reporting to parents. Special orientations, meetings and outreach activities may be convened or attended to promote parental involvement in special education, and may include regular and special education parents.

APPENDIX A3

A3) IMPACT VARIABLES RATING SCALE

1. Teachers' Concerns (regarding child)
    a. Academic/Intellectual
    b. Behavioural (disruptive behaviour; lack of interest; motivation; poor attitude etc.)
    c. Social/Emotional (depressed; withdrawn; poor self-concept; immaturity; dependence)
    d. Parental/Environmental (poor home situation; uncooperative parents; low level of educational concern)
    e. Physical/Health
2. Specificity of Goals (goal by goal)
    a. Vague, general, unmeasurable
    b. General achievement statements usually related to a grade level, e.g. "I want him to read at a Grade 2 level")
    c. General skill statements, e.g. to improve written communication skills or organization skills or social skills or math skills (without any specification of particular skills
    d. Specific skill statements, e.g. number concept to 10; initial consonants etc; inference and prediction in comprehension; completing seat work assignments

3. Goal Relatedness (to expressed concerns)

    a. No relationship

    b. Peripherally related

    c. Partially related

    d. Directly related

4. Teacher Effort (degree of teacher involvement with student)

    a. Non-involvement (referral to special education or to resource teacher)

    b. Minimal intervention (talking to student about performance, attitude, effort, etc.)

    c. Sharing of responsibility with student (episodic, non-systematic intervention)

    d. Teacher takes responsibility (systematic ongoing intervention based on plan)

5. Relatedness of Teacher Effort

    a. No relationship

    b. Peripherally related

    c. Partially related

    d. Directly related

6. Resources Used - In School

   Administrative (Principal/Vice-Principal)

   a. No contact

   b. Exchange of information only (one contact)

   c. Occasional meetings

   d. Ongoing, regular contacts over time

7. Peers

   a. No contact

   b. Single contact

   c. Occasional meetings (intense contact for short periods)

   d. Ongoing contact (regular meetings)

8. Resources Used (System)

   a. No contact

   b. Single, formal contact as required by policy, e.g. IPRC review; assessment, feedback meeting

   c. Sporadic in-school consultation (no follow-up)

   d. Frequent, ongoing contact

9. Resources Used (External)

   a. No contact

   b. Single contact

c. Sporadic contact

d. Frequent contact

10. Usefulness of Resources (to be rated for Administrative Resources, Peers, System Resources, External Resources)

a. Not useful

b. Moderately useful

c. Very useful

11. Individual Pupil Plan (developed)

a. No

b. Yes - informal, not in written form

c. Yes - formal, in written form

APPENDIX B

B1 Design and Procedures

B2 Results - Implementation

B3 Results - Impact

B4 IPRC Study

APPENDIX B1

Design and Procedures

1 The Implementation Component

1.1 Design

1.1.1 Selection of Boards

The initial phase of the study involved three groups of researchers working in five school boards. This phase spanned the period of 1982-1985. The second phase was contracted by the Ministry of Education for the period 1984-1986. It involved one of the original research teams working in two additional boards added for the 1984-1986 period. The data from 1982 to 1985 for two of the original three boards from the first phase were added to the second phase study in a supplemental analysis in the summer of 1986, to make a total sample of six boards. Table 1 illustrates this sampling design for each board. Table 2 describes the size and geographic location of the six boards.

1.1.2 Selection of Interview Sample

In order to ensure that the sample of interviewers in each board was broadly representative of the personnel responsible for the range of special educational programs and services offered in each board, the following steps were taken. In conjunction with administrators and, in some boards, an advisory committee appointed to the project, seven children aged 8 and seven children aged 14 years were selected. All the children had been designated as exceptional. One child in each set of seven had been designated as a member of

Samples of School Boards and Schools for the Implementation and Impact Components

Team Leaders	Board	Project Component	Granting Agency: OISE 1982-83	OISE 1983-84	OISE MOE 1984-85	MOE 1985-86	Number of Schools Studied (1985-86)
Silverman & Wilson (Team 3)	Carleton Public	Implementation monitoring	→	→	→	→	10
		Impact on pupils		→	→	→	
	MSSB-North York Region	Implementation monitoring	→	→	→	→	10
		Impact on pupils		→	→	→	
	Leeds-Grenville	Implementation monitoring		→	→	→	6
		Impact on pupils		→	→	→	
	Kenora Publ.	Implementation monitoring			→	→	5
		Impact on pupils			→	→	
Crealock & Sitko (Team 2)	London Publ.	Implementation monitoring	→	→	→	X[1]	9
		Classroom impact (observation)[3]	→	→	→	X	
	London Middlesex	Implementation monitoring	→	→	→	X	6
		Classroom impact (observation)	→	→	→	X	
Leithwood[2] (Team 1)	York Region	Implementation monitoring	→	→	→		
		Principal survey	→	→	→		

[1] X denotes supplemental analyses in spring, 1986. Team 2 undertook a reanalysis of their data using the modified criteria of Silverman et al., so that six boards could be included in the analysis reported here.

[2] Not included in this report. The report of the Leithwood team is available as an OISE 1985 transfer grant report.

[3] The classroom observation component conducted by Crealock et al. is reported in an OISE 1985 transfer grant

Table 2

School Boards Involved in the Study

Board	Public/Separate	Size	Location	Type
London Board of Education	Public	Medium	West	Urban and Rural
London and Middlesex County Roman Catholic Separate School Board	Separate	Small	West	Rural
Metropolitan Separate School Board, North York Region	Separate	Large	Central	Urban
Carleton Board of Education	Public	Large	East	Suburban
Leeds/Grenville County Board of Education	Public	Medium	East	Urban and Rural
Kenora Board of Education	Public	Small	North	Rural

one category of exceptionally as defined by the Ministry of Education Information handbook (1981). Hence, in each school board two children, one aged 8 and one aged 14 were identified as representative of each of seven categories of exceptionality served by the board. These children were not followed beyond the point of identifying them in the school system. Rather, interviews were conducted with their teachers, the principal of their school and the resource personnel attached to the school. These people formed the sample of personnel who were interviewed for the longitudinal study on the implementation of board- and school-level policies and their responses constituted the implementation and impact monitoring component of the study. Thus we ensured that, from the first year of the project, we had widely sampled the elementary and intermediate/secondary panels of each school board across a variety of special education services.

The school boards selected and the people interviewed cannot be considered as representative of Ontario as a whole. The numbers in each sample are small and in no boards did the researchers have a free hand to obtain completely random samples of interviewers. To some extent, participants were self-selected by their willingness to co-operate. A proportion of the principals were selected by their supervisory officers to represent the more progressive and innovative end of each board's principals. Principals in turn had a hand in which teachers would be interviewed in their school. The results, therefore, may reflect greater commitment to special education than would be provided by a random sample of educators across Ontario. The number of boards also is small, and each board represents a willingness to be scrutinized for the purposes of the project. Nevertheless, over the course of the four years the researchers gained the impression that participants were co-operative, open and objective about the problems and prospects for implementation and about the difficulties which they faced as individuals and professionals.

1.1.3 Changes in design due to personnel moves over the years of the study

As the study progressed, the original first year samples of personnel were reinterviewed as far as possible. Since the principal was thought to be a key person in the formation of school-

level implementation criteria, we continued to track each principal whenever possible, in his or her current school. If a principal had only recently moved to a new school (i.e., within 3 months) the interview was conducted with reference to the old school. Since the research tracked the impact of principals' views on staff behaviours, the new principal of the old school was also interviewed. When teachers moved schools, they were reinterviewed in their new location if they had moved to a school headed by one of our sample principals. Also interviewed was the replacement for the teacher who had moved, providing the sample for that school (principal and one or more teachers) had remained intact for the duration of the study.

As a result of the moves, by 1984-85, the sample of teachers and principals in the two school boards studied by Wilson and Silverman in 1982-83 had risen from 28 to 39. There had been a major reshuffling of personnel in one board in the 1983-84 and 1984-85 school years, and another board had made changes in administration and some principals' postings for the 1984-85 year. The results of the third year of the project (Silverman & Wilson, 1985) showed that considerable variation existed from school to school in all of the boards. However, the design, consisting of one principal and one teacher per school, limited the questions that could be asked about the effect of high or low implementation levels on pupils. The teacher sampled in one school might be a regular class teacher, and in the next a segregated special education class teacher, or a resource teacher. Our results showed that level of implementation as described by principals was related to differences in the deployment of teaching staff. However, with only one teacher to sample per school, inferences could not be drawn about the differential effect on teaching staff of levels of implementation. Therefore, in the final year of the study, 1985-86, the total sample size of schools per board was reduced to 10 or less, while the sample of teaching staff per school was tripled to include one regular class teacher, one segregated special education class teacher (if one existed in that school) and one (occasionally two) special education resource teacher, where one was deployed as a member of the school staff (as distinct from a system-deployed resource consultant). By 1985-86, in each of the six boards almost all schools had a resource teacher on staff, although that person's title, job description and duties varied from board to board, and often from school to school.

Table 3 illustrates this change in sampling in Year 4 of the study.

Table 3

Design: number and status of participants for data included in this report[1]

Status	Board	1982-83	1983-84	1984-85	1985-86
Principals	1	10			8
	2	14			10
	3		5		6
	4			5	5
	5	6			9
	6	7			6
Teachers					
i) Special Education	1	7			11
	2	10			7
	3		1		2
	4			7	6
	5	10			9
	6	4			2
ii) Regular	1	7			9
	2	6			11
	3		9		8
	4			3	1
	5	8			9
	6	4			4
iii) Resource	1	2			5
	2	1			12
	3		5		7
	4				1
	5	3			4
	6	3			4

[1] Data previously reported is not included here.
Previous reports are:

Silverman, H., Wilson, A., & Seller, W. (1985). A study of the implementation of Bill 82. Interim Report. MOE Contract #652.

Silverman, H. & Wilson, A. (1985). Final Report. Ontario Institute for Studies in Education, OISE Contract #1056.

Silverman, H., Wilson, A., & Seller, W. (1986). Interim project report. MOE Contract #652. (February)

Crealock, C. & Sitko, M. (1985). Bill 82 Implementation Study, 1982-1985. Final Reports. OISE Contract #1062.

1.2 Procedure

1.2.1 Implementation Levels and Dimensions

The implementation interviews were conducted with a relatively small number of people, but were quite lengthy and intensive. They provided a detailed picture of how people were responding to the requirements of their school boards and the amended act in providing special education programs and services. The interviews also tapped attitudes, understanding of roles and individuals' concerns about the implementation requirements. The interviews can be likened to sensor points, located across the various ranks of each school board, tapping the current opinions and actions of people as they responded to the changes created by the special education legislation. The implementation component of the study consisted of transcripts of interviews which were coded and scored as representing each of four levels of implementation; none, low, moderate and high. These four levels were operationally defined for five major dimensions of special education:

i) the identification of pupils including referral and assessment activities,

ii) program provisions, pre- and post-IPRC,

iii) review activities, including IPRC review procedures and provisions for ongoing and continuous evaluation of pupil progress,

iv) communication between principals and teachers, and

v) communication between staff and parents.

For each group interviewed, additional dimensions were also defined. For example, for principals a delivery model dimension was included, which included philosophy about integration.

The five main dimensions form the operational criteria for assessing the degree of implementation from year to year and from one board and group to another. Each year of the

project saw a refinement and expansion of these operational criteria, together with reliability estimates and validity checks. The resulting criteria (Appendix A) constitute an important product of this research, defining in considerable detail the behaviours and opinions of principals and teachers at different stages of implementation. The dimensions and their four levels of implementation are not simply a quantitative scale of effort. As the reader will see by inspecting the criteria, low implementation (Level 2) for all dimensions characterizes an approach or philosophy to providing special education which might be termed "restorative" in nature (Wilson, 1983). An interviewee who is rated at this level of implementation holds a consistent view of special education delivery which permeates all its aspects and which governs that person's activities in relation to exceptional pupils. The exceptional pupil is seen to need removal from the regular class teacher's jurisdiction for specialized treatment in a setting away from the regular class. Little communication takes place between educators regarding the prevention of the problem or the adaptation of the pupil's program prior to referral to an IPRC, since the task is seen as primarily a diagnostic one. After the IPRC, integration, if any, is seen as a physical or social placement, with instructional responsibilities remaining exclusively with the special education teacher. Assessment is diagnostic rather than curriculum-based, since its purpose is to confirm teacher concerns that the child is exceptional, rather than to seek program adjustments.

By contrast, the Level 4 or high implementing educator holds a different view of special education delivery, and his/her actions reflect this difference. A high implementer sees the provision of an appropriate program as the key to special education delivery. This is to be attempted by modification of curriculum for pupils who are not yet IPRC'd, but showing some difficulties (or gifts). It is also central to provisions of integration. Staff who are high implementers consult frequently and systematically to ensure that all program opportunities are tried, that the pupil will experience program continuity in regular classroom, resource withdrawal and segregated settings, and that other resource professionals are involved in the program planning and monitoring process. Close communication with parents is also characteristic of Level 4 implementation.

Midway between these levels of implementation is the moderate implementer, who aspires to the philosophy and practices of the high implementer, but has not developed systematic and proven techniques for implementing them. Consultation is intended, but staff meet informally and haphazardly and not systematically and by prearrangement. Program goals are set and monitored, but if accomplished may not be replaced by new goals, since no systematic mechanism is in place for updating them. Goals that are unmet may be tried over and over until the pupil moves or the annual review meeting arrives. The intent for a strong, program-focused approach is there, but it has not received sufficient priority at one or another level in the school or board for it to be fully realized.

1.2.2 Dimensions of Implementation and Bill 82

Each of the dimensions concerns one or more stages of the procedures for pupils who are admitted to or maintained in special education programs. The relationship of each dimension to provisions in the Act and regulations is listed in Table 4.

Interviewers were rated on the identification dimension, for example, according to the type of assessments which they reportedly used, the purpose and scope of the assessment instrument, the extent of consultation with others regarding program adaptation and pupil needs.

The program dimension consisted of two parts which were separately analysed for teachers, but combined for principals; 1) the focus on program modification prior to formal referral, and 2) the focus on program adjustment and monitoring, and the co-ordination of program goals in a variety of settings (integrated, withdrawal, segregated) following placement.

The review dimension also consisted of two parts; 1) the preparation for and participation of staff in the formal IPRC review, and 2) the extent to which pupil progress was continuously monitored and evaluated.

The staff communication dimension concerned the degree of collaboration among staff and specifically between principal and teachers. As noted in the review of literature, a key aspect

Table 4

Relationship of the Key Implementation Dimensions to the Requirements of the Education Act and Regulations

Dimensions of Implementation	Provisions in The Education Amendment Act 1980 and O. Reg. 554/81
1. Identification (including assessment and referral)	Act Sec. 1(2) 21; "exceptional pupil" Act Sec. 8(2a); "early and ongoing identification" Act Sec. 1(1) 63; "continuous assessment and evaluation" O. Reg. 554/81, Act Sec. 2(3); educational assessment
2. Program	Act Sec. 1(1) 63; "a program that includes a plan containing specific objectives and an outline of services that meets the needs of the exceptional pupil" Act Sec. 8(2); "The Minister shall ensure... appropriate special education programs and... services" Act Sec. 34(8); "appropriate program for exceptional pupils
3. Review i) IPRC reviews ii) "continuous assessment and evaluation"	i) O. Reg. 554/81 Sec. 10; "The committee... shall consider on the basis of written reports and other evidence whether the placement of the pupil appears to meet the needs of the pupil" ii) Act Sec. 1(1) 63; "program based on and modified by the results of continuous assessment and evaluation" iii) Act Sec. 71(3); Trainable Retarded
4. Communication between Staff	O. Reg. 262, 12 (2a, 2d); Duties of principals O. Reg. 262, 21 (d); Duties of teachers O. Reg. 262, 23; Support Staff
5. Communication with Parents	Act Sec. 8(2); "The Minister...shall provide for the parents or guardians to appeal the appropriateness of the special education placement" O. Reg. 554/81, Sec. 2; Assessment and placement consents, consultation Act Sec. 4-7, Sec. 11-12; parental rights to due process Act Sec. 8(1), Sec. 10(3); review discussions, participation and consent

of implementation concerns the principal's ability to communicate effectively with staff, and to encourage their efforts toward successful program delivery. Similarly, communication with consultation resources seems to be crucial for teachers to implement special provisions, especially in regular classrooms. Recent delivery models for special education emphasize consultation and teamwork (Miller and Sabatino, 1978).

The parent communication dimension differs somewhat from the other four dimensions in that parental involvement is a requirement of the Act and regulations, but is additional to the day-to-day work in the school. In order to comply with provisions for parental involvement, a school staff and in particular a principal, must ensure that extra steps are taken to invite and encourage parents to participate (Table 4).

It should be stated that the levels of implementation for each dimension all comply with the letter of the law. A school staff which consistently demonstrate the criteria for low implementation, Level 2, are nonetheless complying with the legal requirements. School boards may add further requirements, such as a commitment to integration, collegial co-operation etc. However, Level 2 or low implementation is by and large an acceptable level of implementation in terms of fulfilling the legal mandate. For a school or board to go beyond this level, the wording of the Act and regulations must be interpreted as implying more provisions than these minimal criteria. By translating the provisions according to Level 3 and 4 criteria, school personnel are importing ethical, professional and personal values in designing their delivery systems.

This is an important point to make since, in drafting the criteria for each level of implementation, the researchers drew from research literature, the philosophies of board and school personnel and such sources as tribunal deliberations and legal cases. The interviewees who hold Level 2 views of implementation should not be regarded as negatively disposed to exceptionality, poorer educators, or prejudiced. It is more likely that these educators have not thought deeply about or given priority to serving the exceptional pupil. Indeed, this approach has a long history in special education, reflecting the medical roots of the field (Mercer, in Hobbs, 1975). It has more recently been subject to criticism on philosophical and humanitarian

grounds by Reschly (1978) and Sarason and Doris (1979), as well as on pedagogical grounds (Ysseldyke & Algozzine, 1982).

Levels 3 and 4 require a commitment to a more co-ordinated process of delivery which focuses upon program effectiveness and the progress of a pupil. The interviewees who reflect these levels seem to place greater priority on meeting the needs of exceptional pupils. Level 2 awareness presumes that exceptionality is the domain of the special educator, while Level 4 is reflected in a total staff awareness of and commitment to the needs of all pupils.

For these reasons, the levels of implementation developed for this project are not evaluation instruments. They do not stand as qualitative criteria with which to judge the commitment of individuals, but rather they gauge the degree to which special needs receive a priority in the daily efforts and activities of teachers and principals.

1.2.3 Data Collection and Analysis

The interview schedules developed to monitor implementation were modified and extended annually, commencing in 1982-83. Principals were interviewed in Years 1, 3 and 4 in boards A and B, and in two of Years 2, 3 and 4 in boards C and D. In boards E and F, principals were interviewed in Years 1 and 3. The data for these latter boards were rescored in 1985-86 to align them with the data of the other four boards (Table 1).

Teachers were interviewed using the implementation schedule in Years 1 and 4 in boards A and B, in Years 3 and 4 in boards C and D, and in years 1 and 3 in boards E and F (Table 1). Since the design of the sample of teachers in boards E and F matched the Year 4 design for the other four boards, the recoded results for both principals and teachers of these two boards were included in the Year 4 analysis, so that the effect of variations in principal ratings on staff could be compared for all six boards. The final year analysis, reported here, was actually collected in the fall of 1985 and early spring of 1986 in four of the boards, and in the spring of 1985 in boards E and F.

In the first year of the study, all interviews were tape recorded. This proved unwieldy, however, and apparently caused some withholding of information by some interviewers, since several spoke more freely once the interview had been completed - and the tape recorder stopped. In subsequent years, the interview schedules were considerably changed so that specific questions could be asked, and extensive notes taken on the interview schedule forms. The final year interview forms are provided in Appendix C.

Several staff conducted interviews. In addition to the four principal investigators, five research officers were employed at different times on the project. In order to ensure consistency across interviewers, extensive training sessions were conducted, to assist interviewers to understand the purpose of the project, the nature of probing questions and the type of information to be elicited.

The interview data for boards A to D were coded by two investigators. They made annotations of the interview data, a necessary step since few interviewers responded directly to questions, but often diverged at length from the topic in hand. This material was reorganized into the five dimensions under study, and ratings applied. Because the rating levels are complex and contain several criteria, raters used mid points if necessary, (e.g. a rating of 2.5 for a dimension that demonstrated some of the characteristics of Level 2 and some of Level 3 implementation). The resulting ratings form a 7-point scale of 1 to 4, with midpoints of 1.5, 2.5 and 3.5. This scale is ordinal, but the number of respondents is sufficiently large to permit parametric statistical analysis. Multivariate analyses of variance with repeated measures were applied to answer some of the questions raised in the study; Pearson product-moment correlations were conducted to deal with others.

2 The Impact Component

2.1 Design

There are two studies which addressed classroom impact issues. As Table 1 indicates, Drs. Sitko and Crealock at the University of Western Ontario analysed their Years 1 to 3 data of classroom observations for boards E and F to ascertain whether levels of implementation correlated with the patterns of classroom interaction involving teachers and exceptional pupils. Some of their results are published elsewhere (Sitko and Crealock, 1985). In the study reported here the principal investigators (Silverman and Wilson) commenced an impact study in 1983-84 in boards A and B, and subsequently expanded the study to two further boards, C and D, completed in 1985-86. In the final year of the project, this component was greatly expanded, as described below.

The purposes of this classroom impact study were to see how the description of the special education delivery system in a school, as given by the principal, corresponded to that given by the teachers, and how the description and rating of level of implementation for the personnel in that school had an effect on the teachers' opinions, beliefs and actions in the classroom. One hypothesis of the study is that, compared to schools with low levels of implementation, schools which have a high level of special education implementation, as judged from principal and teacher interviews, would have a greater range of services and resources available to both special education and regular classroom teachers, would result in higher levels of expressed satisfaction on the part of teachers, and would assist the teachers to fulfill more of the objectives set for individual pupils and solve more teacher concerns about individual pupils.

2.2 Sample and Procedures

Commencing in the second year of the study, teachers were interviewed twice each year. In the first round of interviews in the fall of each year, teachers nominated pupils who they considered to be of concern, including pupils who were and were not deemed exceptional. They described objectives and program goals set for each pupil and proposed which resources they would draw on. In the second round of interviews at the end of each school year, teachers were asked to indicate how they had actually attempted to meet their objectives for their students and what resources and services they had used to assist them.

Because of the increase in sample size described above, by the end of the third year, 1985-86, a total of 39 schools were sampled in the four boards, schools which ranged in assessed level of implementation from low to very high. While the impact component of the study had yielded some interesting data in terms of teachers' ability to deal with exceptional pupils, we decided in the final year of the study to substantially increase the interview sample of teachers, and to do so in a subsample of 10 schools in each of boards A and B. The numbers of schools in boards C and D remained the same. The sample of schools for Year 4 was chosen to represent the range of levels of implementation, from low to high, as rated from Year 1 and Year 2 principal interviews. In parallel with the implementation component of the project, three teachers were selected from each school: one regular class, one special education class and one resource teacher. One round of interviews only was conducted in Year 4.

In Year 4 teachers were again asked to nominate two pupils, including both exceptional and regular class children who were causing them concern. Teachers suggested objectives for these pupils, techniques and methods which they had intended to use to meet the objectives and a description of the resource personnel whom they had contacted to assist them. At the end of the interview, if an individual program plan was recorded for a child copies were requested, with the full identification of the pupil removed. About 40% of the nominated pupils had such a plan.

The sample sizes for each of the three years of the impact component of the study are shown in Table 3.

2.2.1 Impact Rating Procedures

Appendix A contains the criteria which were developed to rate the teachers' descriptions of their work with nominated pupils.

Teachers' descriptions of pupils were first classified from descriptions of the expressed concerns as:

1. academic
2. behavioural, including motivational and disruptive problems
3. emotional, including self-concept
4. environmental, including parental support problems and the need for social-emotional intervention that went beyond the classroom, and
5. physical, including environmental adaptation difficulties.

The task of the raters was then to rate the extent to which goals were specific and realizable, were set to correspond to concerns, and the extent to which teachers' efforts were directed toward the goals. As Appendix Aiii shows, ratings were usually based on a four-point scale which corresponded to certain dimensions rated in the implementation data. In addition, the resources used in and out of the school, the administrative support received and the communication with parents were each rated.

Interrater reliabilities were calculated for an independently rated set of 24 teachers.

APPENDIX B2

RESULTS - IMPLEMENTATION

The implementation results section is structured to address the following questions in the order shown:

1. Reliability of Measures

2. Longitudinal

    a. Has there been an overall gain in level of implementation between Years 1 (1982-83) and 4 (1985-86) of the study?

    b. Are some dimensions of implementation better implemented than others?

    c. Have some dimensions shown greater gains in implementation than others?

3. Group Comparisons

    a. Are there differences in implementation from board to board?

    b. Are there differences in gains in relation to teaching status; (i.e., principals compared to special education teachers, resource teachers and regular teachers)?

    c. Are there differences in gains related to elementary and secondary panels?

4. Factors Influential in the Level of Implementation Achieved

    a. What relationship exists between the implementation level of principals and those of their staff?

    b. What relationship exists between the implementation levels of teaching groups?

    c. Are there differences between staff on implementation patterns in elementary and secondary schools?

    d. How does the Franco-Ontarian school compare to overall school ratings?

5. Relationship between teacher groups on impact dimensions

   a. principals' implementation and teachers' impact.

   b. teachers' implementation and impact.

6. I.P.R.C. provincial survey

7. Funding issues

Implementation Results

1. Reliability and Validity of Measures of Implementation

Since the ratings of teachers and principals are based on self report data, and are ordinal, they are susceptible to variation due to error. The following steps were taken to determine the reliability of internal consistency of the rating scales.

a. Cronbach's Coefficient α . The ratings of all Year 4 interviews were used for this analysis. Each of the five dimensions - identification, program, review, communication between principal and staff, and communication with parents - were treated as five subtest scales. The purpose of the analysis was to assess the reliability of the sum of each of the five variables as an estimate of the final score of the people interviewed. Cronbach's coefficient α is one such estimate, and is equivalent to the better known reliability coefficient KR-20 (Kuder-Richardson-20). The α coefficient, with 86 cases, was + 0.839.

b. Within-group Correlations. Table 5 contains the correlations of the ratings of each dimension with those of every other dimension for each of the four groups. The purpose of this analysis is to examine the consistency of each person's rating over all five dimensions, since one would expect that a reliable rating scale would lead to consistent ratings on all dimensions. The principals' data (Table 5a) clearly meet this criterion. There is also fairly high correlations with dimensions for the regular teacher group. Resource teachers show correlations in identification,

Table 5

Correlations of the Ratings on Dimensions Within Each of the Four Groups; principals, special education teachers, regular teachers and resource teachers

a) Principals

		Identification	Program	Evaluation	Communication With Staff
Program	r	.57**			
	n	42			
Evaluation	r	.53**	.58**		
	n	42	43		
Communication	r	.68**	.59**	.71**	
- staff	n	36	37	37	
- parents	r	.62**	.43**	.47**	.49**
	n	42	43	43	37

b) Special Education Teachers

		Identification	Program	Evaluation	Communication With Staff
Program	r	.83**			
	n	14			
Evaluation	r	.37	.39*		
	n	14	32		
Communication	r	.63	.37	-.13	
- staff	n	6	18	18	
- parents	r	.18	.58**	.43*	.17
	n	13	31	31	18

** significant at $p < .01$

* significant at $p < .05$

Table 5 (Cont'd)

Correlations of the Ratings on Dimensions Within Each of the Four Groups: principals, special education teachers, regular teachers and resource teachers

c) Regular Classroom Teachers

		Identification	Program	Evaluation	Communication With Staff
Program	r	.57**			
	n	31			
Evaluation	r	.54**	.57**		
	n	32	31		
Communication	r	.51*	.51**	.35	
- staff	n	24	22	22	
- parents	r	.31	.41*	.27	.36
	n	34	32	33	24

d) Resource Teachers

		Identification	Program	Evaluation	Communication With Staff
Program	r	.78**			
	n	33			
Evaluation	r	.62**	.71**		
	n	33	34		
Communication	r	.07	.27	.16	
- staff	n	23	23	23	
- parents	r	.45*	.50*	.46*	.28
	n	31	32	32	23

** significant at $p < .01$

* significant at $p < .05$

program, evaluation, and communication with parents, but communication with the principal does not correlate significantly with other dimensions. This finding also holds for the special education teacher, although the small number of respondents on the identification dimension makes it difficult to draw conclusions about the correlation coefficients shown.

On the whole, the ratings of the five dimensions appear to be highly reliable in terms of their consistency across respondents.

The validity of the implementation scales depend on several factors. Readers will be obliged to judge for themselves whether the operational definitions provided in Appendix A satisfy the criteria for low to high implementation. As discussed in the method section, several sources in the literature suggest that the dimensions may match criteria represented by the writings of leading proponents of special education delivery alternatives.

At a more statistical level, the validity of the criteria is supported by the inter-group correlations, especially those of principals. The one anomalous dimension is communication between principals and staff, and will be discussed later.

2. Longitudinal Results

a. Has there been an overall gain in level of implementation between Year 1 (1982-1983) and Year 4 (1985-1986) of the study?

The results of implementation ratings in Year 1 and Year 4 are presented in Table 6, together with the gains scores. Viewed overall, gains were made in every dimension. The largest gains, of more than one full scale point (on the 4-point scale) were made by Board 1 on identification, program and review, and by Board 5 on identification and communication with staff. One loss was recorded on the ratings for communication with parents in Board 6, but was so small (- 0.30) that it can be equated with no change on this dimension.

Table 6

Mean Implementation Levels and Gains of Principals and Teachers for Each of Six School Boards, Year 1 (1982-83) and Year 4 (1985-86)

Board	Year	Dimension														
		Identification			Program			Review			Communication with: Staff			Communication with: Parents		
		n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.
1	1	26	2.42	.87	26	2.19	.80	24	1.85	.87	--	--	--	26	2.40	.96
	4	28	3.46	.47	33	3.38	.55	33	2.89	1.01	34	2.96	.79	34	3.04	.73
	gains		1.04			1.19			1.04			--			.64	
2	1	31	2.39	.84	31	2.37	.83	31	2.00	.83	11*	2.36	.67	30	1.97	.81
	4	35	2.74	.59	37	2.66	.71	38	2.46	.87	38	2.16	.85	40	2.88	.68
	gains		.35			.29			.46			--			.91	
3	2															
	4	22	2.70	.87	22	2.91	.67	23	2.50	.92	22	2.16	.98	23	2.63	1.05
	gains															
4	3															
	4	13	3.07	.45	13	2.58	.71	13	2.92	.67	--	--	--	13	2.81	.90
	gains															
5	1	21	2.07	1.04	27	2.31	.98	29	2.47	1.12	8*	1.69	1.00	29	2.24	1.15
	4	28	3.25	.71	31	3.08	.87	31	2.90	.99	9*	2.78	.90	28	2.69	1.07
	gains		1.12			.77			.43			1.09			.35	
6	1	18	2.67	.73	18	2.25	.81	17	2.56	.95	7*	2.86	.63	18	2.53	.90
	4	16	3.20	.59	16	3.25	.48	16	3.06	.57	6*	3.42	.58	16	2.50	.91
	gains		.53			1.00			.50			.56			(.03)	
All Boards	1	96	2.38	.88	102	2.29	.85	101	2.49	.98	26	2.29	.87	103	2.25	.97
	4	135	3.06	.71	152	2.99	.73	154	2.75	.91	109	2.57	.94	154	2.80	.88
	gains		.68			.70			.26			.28			.55	

* Data for principals only

The total picture provided by the results is that all boards increased in level of implementation along the dimensions defined by the investigators in Appendix A, between 1982 and 1986.

b. Are some dimensions of implementation better implemented than others? Have some dimensions shown greater gains in implementation than others?

Multivariate analyses of variance were conducted on the results for Years 1 and 4. The design for the analyses compared teacher status (four groups) by dimension (a repeated measure) for each year. Table 7 displays the means of principals and teachers by board, and Table 8 displays the multivariate analysis of variance tables. For Year 1, the dimension of communication between principal and staff was excluded from the analysis because insufficient data was collected to provide a meaningful analysis.

The results show that there were no significant differences between the dimensions in Year 1, but by Year 4, differences had emerged. Helmert contrasts of the five dimensions showed that identification (mean = 3.02), program (mean = 3.01) and communication with parents (mean = 2.91) were significantly more highly rated than evaluation/review (mean = 2.67) and communication between principal and staff (mean = 2.57). Over the period of implementation two of the three dimensions which describe the provision of service directly to pupils, that is, identification and programming, had been implemented to a higher level than the two communication dimensions. More will be said about this dichotomy in dimensions in the section on the relationship between principals' and staff groups' levels of implementation.

Gains for combined groups were made on all dimensions, but were largest in identification and program (Table 6). The pattern of gains of teachers across dimensions differs from that of principals, as will be discussed in section 4(c).

Table 7

Mean Implementation Levels of Principals and Teachers on Five Common Dimensions: Years 1 and 4

Board	Year	Status	Identification			Program			Review			Communication with: Staff			Parents		
			n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.
1	1	Principals	10	2.50	1.27	10	2.05	.90	8	1.81	.84	--	--	--	10	2.70	.95
	4	Principals	8	3.62	.44	8	3.56	.62	9	3.17	.71	9	3.56	.46	9	3.39	.65
		gains (losses)		1.62			1.51			1.36						.69	
	1	Teachers	16	2.37	.50	16	2.28	.75	16	1.87	.90	--	--	--	16	2.22	.95
	4	Teachers	20	3.40	.48	25	3.32	.52	24	2.79	1.09	25	3.12	.81	25	2.92	.73
		gains (losses)		1.03			1.04			.92						.70	
2	1	Principals	14	2.96	.57	14	2.75	.55	14	2.29	.83	11	2.36	.67	14	2.21	.70
	4	Principals	10	3.15	.60	10	2.90	.77	10	2.70	.79	8	2.69	.26	10	2.95	.64
		gains (losses)		.19			.15			.41			.33			.74	
	1	Teachers	17	1.91	.73	17	2.06	.90	17	1.76	.77	16	1.87	.81	16	1.76	.86
	4	Teachers	25	2.58	.51	27	2.57	.67	28	2.37	.90	30	2.70	.57	30	2.85	.70
		gains (losses)		.67			.51			.51			.83			1.09	
3	4	Principals	6	3.33	.52	6	3.08	.37	6	2.52	.58	6	2.12	.66	6	3.17	.75
	4	Teachers	16	2.47	.87	16	2.84	.74	17	2.35	.98	17	3.06	.56	17	2.44	1.09
4	4	Principals	5	3.00	.50	5	3.00	.00	5	3.50	.35	--	--	--	5	3.40	.65
	4	Teachers	2	3.25	.35	8	2.31	.80	8	2.56	.56	8	2.44	.62	8	2.44	.86

Table 7 (Cont'd)

Mean Implementation Levels of Principals and Teachers on Five Common Dimensions: Years 1 and 4 (Cont'd)

Board	Year	Status	Identification			Program			Review			Communication with: Staff			Parents		
			n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.
5	1	Principals	6	2.58	1.07	6	2.17	.98	8	1.88	1.03	8	1.69	1.00	8	2.37	1.09
	4	Principals	9	3.11	.65	9	3.17	.61	9	2.67	1.05	9	2.78	.91	9	3.06	.81
		gains (losses)		.53			1.00			.79			1.09			.69	
	1	Teachers	15	1.87	.99	21	2.36	1.00	21	2.69	1.09	16	2.37	.88	21	2.19	1.19
	4	Teachers	19	3.12	.78	22	3.04	.96	22	3.02	.96	16	2.72	.84	19	2.53	1.16
		gains (losses)		1.25			.68			.33			.35			.34	
6	1	Principals	7	3.29	.39	7	1.71	.57	6	2.58	.92	7	2.86	.63	7	3.07	.67
	4	Principals	6	3.33	.41	6	3.33	.41	6	3.00	.63	6	3.42	.58	6	3.17	.41
		gains (losses)		.04			1.62			.42			.56			.10	
	1	Teachers	11	2.27	.61	11	2.59	.77	11	2.54	1.01	11	2.86	1.03	11	2.18	.87
	4	Teachers	9	3.11	.70	10	3.20	.54	10	3.10	.57	9	2.78	.87	10	2.10	.91
		gains (losses)		.84			.61			.56			(.08)			(.08)	
All Boards	1	Principals	37	2.84	.89	37	2.70	.81	36	2.13	.90	26	2.28	.87	39	2.52	.88
	4	Principals	42	3.25	.55	43	3.17	.60	43	2.92	.79	37	3.04	.68	43	3.15	.66
		gains (losses)		.41			.47			.79			.76			.63	
	1	Teachers	59	2.09	.75	65	2.30	.88	65	2.22	1.02	43	2.31	.96	64	2.09	1.00
	4	Teachers	91	2.96	.75	108	2.92	.78	109	2.67	.95	105	2.85	.72	109	2.65	.91
		gains (losses)		.87			.62			.45			.54			.54	

Table 8

a) Analysis of Variance of Four Implementation Dimensions[1] by Teaching Status; Year 1

	SS	df	M.S.	F	Sign. at p<
Within cells	131.19	88	1.49		
Status	72.32	3	24.11	16.17	.001
Dimension	1.19	3	.40	1.29	NS
Status by Dimension	16.33	9	1.81	5.89	.001

[1] communication with staff is omitted

b) Analysis of Variance of Five Implementation Dimensions by Teaching Status; Year 4

	SS	df	M.S.	F	Sign. at p<
Within cells	145.63	86	1.69		
Status	23.25	3	7.75	4.58	.005
Dimension	14.78	4	3.69	12.08	.001
Status by Dimension	4.94	9	.55	1.44	NS

3. Group Comparisons

a. Are their differences in implementation from board to board?

Figure 1 and Tables 6 and 7 show the pattern of dimensions in Year 4 for each of the six boards. A multivariate analysis of variance (boards by dimensions) was conducted to examine the significance of the differences found. There were significant differences between boards, and a significant interaction between dimensions and boards. This interaction is illustrated in Figure 1.

Clearly, Board 1 is generally ahead of the other boards, and Board 2 is generally behind. However, it would be unfair to rank the six boards, since each excels in some dimension and lags in others. For the picture of how Bill 82 has been implemented, Figure 1 tells us what might have been predicted; that there is no uniformity in implementation from board to board. Evaluation procedures for monitoring pupil progress and communication with parents currently have the greatest room for improvement, although Board 4, with low ratings in the provision of program, curiously rates highly on evaluation of progress. This board's results reverse the trend of the other five boards.

b. Are there differences in gains in relation to teaching status?

Table 6, the table of gains from Year 1 to Year 4, displays the comparative scores of principals and teachers. Principals are rated higher on all dimensions. Lowest ratings are given to regular class teachers, as shown in Tables 9 and 10 in which the results are displayed separately for the three teaching groups for Years 1 and 4. The multivariate analysis of variance, Table 8, indicates that teaching status is significant in both years, with the ratings of principals (Year 4 mean = 3.14) higher than those of other staff groups. However, gains made by principals between Years 1 and 4 (mean = 0.611) is comparable to the gains made by teacher groups (mean = 0.604). Teachers made greatest gains on identification and lowest gains on evaluation/review, while the converse is true of principals. Perhaps principals entered the study with procedures for identification well developed, but

Table 9

Results of Implementation Level Ratings For Teachers - Year 1, 1982-83

Board	Teacher Status	Identification			Post-placement Program			Involvement in IPRC			Ongoing Evaluation			Communication with: School Staff			Communication with: Parents		
		n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.	n	$\bar{x}$	S.D.
1	Sp. Ed.	7	2.50	.64	7	2.85	.62				7	2.42	.84				7	2.79	.76
	Regular	7	2.28	.39	7	1.71	.49				7	1.14	.38				7	1.64	.63
	Resource	2	2.25	.35	2	2.25	.35				2	2.50	.71				2	2.25	1.77
	Board n & mean	16	2.37	.50	16	2.28	.75				16	1.87	.90				16	2.22	.95
2	Sp. Ed.	10	2.20	.75	10	2.50	.75				10	2.20	.67	10	2.00	.94	9	2.24	.83
	Regular	6	1.41	.49	6	1.25	.61				6	1.00	.00	5	1.55	.55	6	1.16	.41
	Resource	1	2.00	.00	1	2.50	.00				1	2.00	.00	1	2.00	.00	1	1.00	.00
	Board n & mean	17	1.91	.73	17	2.06	.90				17	1.76	.77	16	1.87	.80	16	1.76	.86
5	Sp. Ed.	4	2.75	.96	10	3.05	.64	10	2.90	1.17	10	3.20	.86	5	2.35	1.04	10	2.90	1.22
	Regular	8	1.37	.74	8	1.37	.69	8	1.45	.87	8	1.75	.76	8	2.20	.92	8	1.25	.53
	Resource	3	2.00	.74	3	2.66	.29	2	4.00	.00	3	3.50	.87	3	3.00	.00	3	2.33	.57
	Board n & mean	15	1.87	.99	21	2.36	1.00	20	2.40	1.33	21	2.69	1.09	16	2.37	.89	21	2.19	1.18
6	Sp. Ed.	4	2.12	.25	4	2.75	.50	4	2.30	1.00	4	2.87	.75	4	2.50	1.48	4	2.75	.65
	Regular	4	2.00	.00	4	2.00	.82	4	1.00	.00	4	1.87	1.18	4	3.12	.75	4	1.62	.75
	Resource	3	2.83	1.00	3	3.17	.58	3	3.25	.58	3	3.00	.87	3	3.00	.87	3	2.16	1.04
	Board n & mean	11	2.27	.61	11	2.59	.77	11	2.05	1.10	11	2.54	1.01	11	2.86	1.00	11	2.18	.87
Totals		59	2.09	.75	65	2.30	.88	31	2.27	1.25	65	2.22	1.02	43	2.31	.96	64	2.08	.99

Figure 1. Year 4 Mean Implementation Ratings By School Board for Principals and Teachers Combined

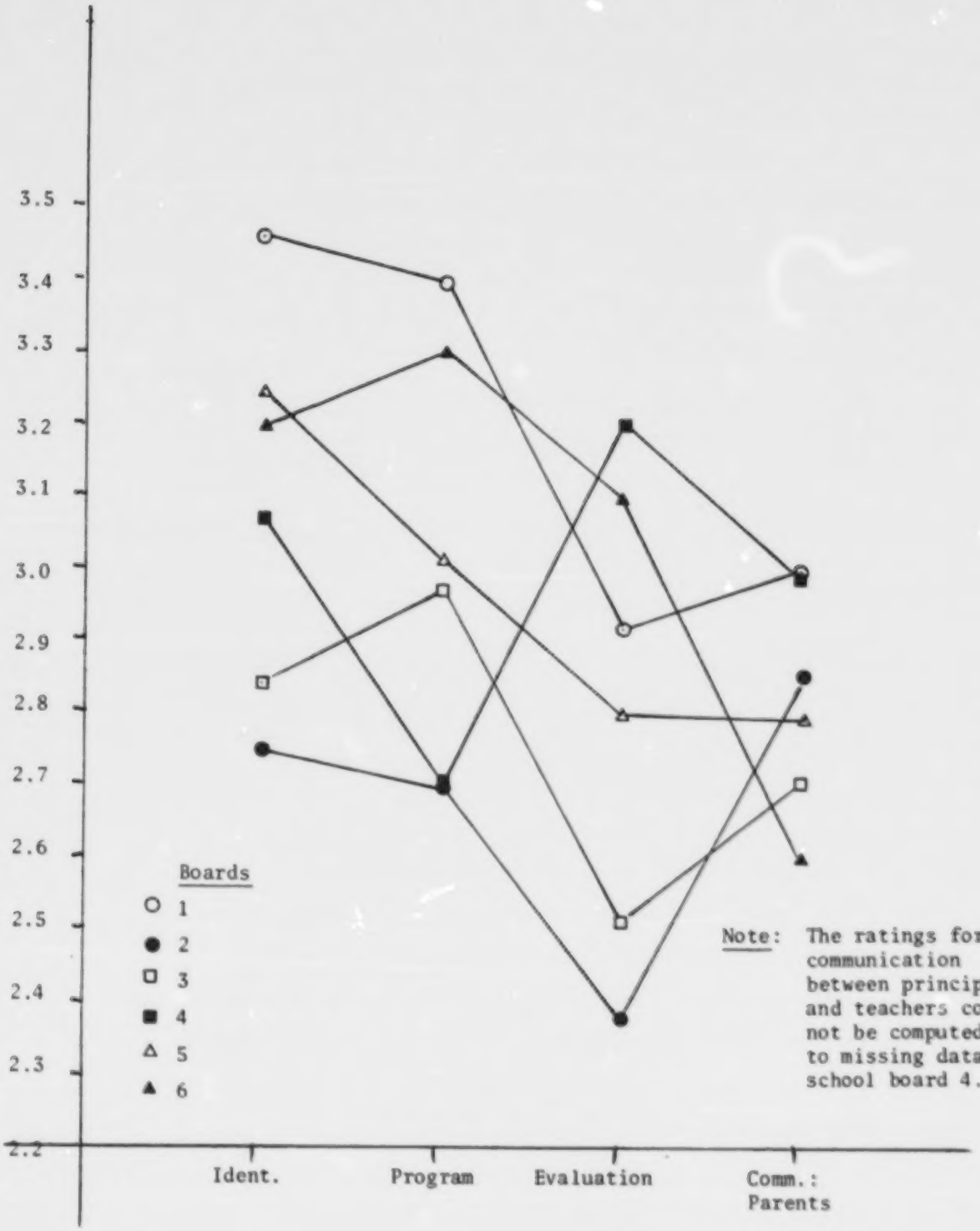


Table 10

Means (and Standard Deviations) of Implementation Ratings For Teachers in Each of Six School Boards, Year 4

Board	Role	Ident.		Program				Review						Communication			
		n		n	Pre	n	Post	n	IPRC	n	Eval.	n	Staff	n	Principal	n	Parents
A	Sp. Ed.	6	3.17 (.41)	6	3.00 (.63)	11	3.18 (.40)	11	2.72 (.75)	11	2.32 (1.08)	11	2.81 (.87)	11	2.82 (.75)	11	2.95 (.72)
	Reg.	9	3.89 (.49)	8	3.31 (.46)	9	3.22 (.62)	9	2.11 (1.05)	8	2.94 (1.15)	9	3.11 (.74)	9	2.50 (.71)	9	2.67 (.66)
	Resource	5	3.70 (.45)	5	3.50 (.50)	5	3.80 (.27)	5	3.60 (.42)	5	3.60 (.41)	5	3.80 (.27)	5	3.00 (1.00)	5	3.30 (.84)
B	Sp. Ed.	2	2.00 (.00)	3	3.33 (.29)	7	2.57 (.84)	7	2.50 (.65)	7	3.21 (.64)	7	2.43 (.73)	7	2.29 (.95)	7	3.21 (.70)
	Reg.	11	2.64 (.55)	11	2.50 (.71)	9	2.39 (.74)	8	1.56 (.73)	10	2.00 (.82)	11	2.68 (.51)	11	1.64 (.81)	11	2.59 (.77)
	Resource	12	2.63 (.48)	12	2.87 (.43)	11	2.72 (.52)	12	2.42 (.67)	11	2.18 (.81)	12	2.87 (.48)	12	2.21 (.89)	12	2.87 (.57)
C	Sp. Ed.	0	--	0	--	2	2.75 (1.06)	2	3.00 (1.41)	2	3.00 (1.41)	2	3.00 (.00)	2	1.50 (.71)	2	3.00 (1.41)
	Reg.	9	2.11 (.65)	8	2.13 (.44)	7	2.64 (.48)	9	1.39 (.33)	8	1.75 (.38)	8	2.75 (.46)	7	1.71 (.70)	8	2.00 (.76)
	Resource	7	2.93 (.93)	7	2.93 (.84)	7	3.07 (.93)	7	3.07 (.79)	7	2.86 (1.07)	7	3.43 (.53)	7	2.14 (1.21)	7	2.78 (1.29)

Table 10 (Cont'd)

Means (and Standard Deviations) of Implementation Ratings For Teachers in Each of Six Boards, Year 4

Board	Role	Ident.		Program				Review				Communication					
		n		n	Pre	n	Post	n	IPRC	n	Post	n	Staff	n	Principal	n	Parents
D	Sp. Ed.		--		--	6	2.42 (.66)	6	2.67 (.52)	6	2.58 (.58)	6	2.42 (.66)		--	6	2.58 (.74)
	Reg.	1	3.00 (.00)	1	2.00 (.00)	1	1.00 (.00)	1	2.00 (.00)	1	2.00 (.00)	1	2.00 (.00)		--	1	1.00 (.00)
	Resource	1	3.50 (.00)	1	3.00 (.00)	1	3.00 (.00)		--	1	3.00 (.00)	1	3.00 (.00)		--	1	3.00 (.00)
E	Sp. Ed.	6	3.67 (.26)		--	9	3.44 (.58)	9	3.22 (1.76)	9	3.39 (.86)	7	2.93 (.89)		--	8	2.87 (1.25)
	Reg.	9	3.00 (.97)		--	9	2.39 (1.11)	9	1.61 (.96)	9	2.24 (.92)	7	2.29 (.70)		--	9	2.00 (1.00)
	Resource	4	3.50 (.71)		--	4	3.63 (.25)	4	3.25 (.96)	4	3.50 (.71)	2	3.50 (.00)		--	2	3.50 (.00)
F	Sp. Ed.	1	3.50 (.00)		--	2	3.00 (.71)	2	2.50 (.71)	2	3.00 (.71)	2	2.75 (1.06)		--	2	1.75 (1.06)
	Reg.	4	2.50 (.41)		--	4	2.88 (.48)	4	1.00 (.00)	4	2.63 (.25)	4	2.37 (.85)		--	4	1.50 (.71)
	Resource	4	3.63 (.48)		--	4	3.62 (.25)	4	3.50 (.41)	4	3.63 (.25)	3	3.33 (.76)		--	4	2.87 (.48)

learned over the period of implementation how to conduct more effective program-based evaluation of pupil progress. Meanwhile, teachers, who in Year 1 did slightly better on program and evaluation than on identification, acquired increased skills for identification over the four-year implementation period.

c. Are there differences in gains related to elementary and secondary panels?

Tables 11 and 12 display the implementation means for secondary and for elementary schools in Years 1 and 4. Table 11 contains the principals' ratings and Table 12 shows the teachers' ratings. The gains scores are the differences between Year 1 and 4 mean scores.

Secondary schools commenced the implementation phase for special education with very low scores, particularly for teachers. On each dimension, a score of 1 indicates that no provisions are in place. A score of 2 indicates low or token levels of provisions. Year 1 teacher scores were less than 2.0 on two dimensions, identification and communication with parents. However, by Year 4 each of these dimensions show gains of more than one scale point. Indeed, secondary teachers and principals display significantly larger gains than elementary teachers and principals over the four-year implementation period, although elementary staffs still maintain a higher level of implementation than secondary staffs in Year 4 on all dimensions in Year 4.

4. Factors Influential in the Level of Implementation Achieved

a. What relationship exists between the implementation levels of principals and those of their staff?

Tables 13 to 15 display the correlations between the implementation ratings of each of the four groups interviewed in 1985-86 (Year 4). Figure 2 displays the mean implementation ratings by staff group. Each correlation table can be examined in two ways. The diagonal cells of each table represent the correlations between the matching dimensions of each group; for example, the identification

Table 11

Mean Implementation Scores (and Standard Deviations) for Principals by Secondary and Elementary Schools; Years 1 & 4

		Identification		Program		Review		Delivery Model		Communication with: Staff		Parents	
		n		n		n		n		n		n	
1	Secondary	9	2.33 (1.15)	9	2.00 (.90)	11	.73 (.93)	7	2.14 (.90)	7	1.71 (.81)	11	2.18 (.87)
	Elementary	26	3.00 (.77)	26	2.33 (.80)	23	2.35 (.87)	19	2.71 (.63)	17	2.38 (.76)	26	2.71 (.87)
4	Secondary	8	2.94 (.68)	9	3.06 (.63)	9	2.61 (1.08)	9	2.78 (.79)	9	2.67 (.75)	9	2.67 .79
	Elementary	30	3.32 (.48)	30	3.23 (.62)	30	3.00 (.68)	30	3.35 (.49)	26	3.15 .61	30	2.67 .55
gains	Secondary		.61		1.06		.88		.64		.96		.49
	Elementary		.32		.90		.65		.54		.77		-.04

Table 12

Mean Implementation Levels (and Standard Deviations) for Teachers by Secondary and Elementary Schools; Years 1 & 4

Year	Panel	Programming						Review				Communication with:					
		Ident.		Pre IPRC		Post IPRC		IPRC		Eval.		Principal		Staff		Parents	
		n		n		n		n		n		n		n		n	
1	Sec.	21	1.76 (.60)			24	2.06 (.80)	16	1.91 (1.24)	24	2.08 (1.09)			16	2.28 (.71)	24	1.67 (.87)
	Elem.	36	2.26 (.78)			39	2.41 (.97)	15	2.67 (1.18)	39	2.27 (1.04)			25	2.32 (1.13)	38	2.30 (1.01)
4	Sec.	19	2.89 (.76)	10	2.65 (.67)	23	2.98 (.82)	24	2.48 (1.20)	24	2.90 (1.05)	12	1.67 (.79)	19	2.84 (.69)	23	2.17 (1.11)
	Elem.	54	3.13 (.67)	39	2.92 (.66)	65	3.06 (.67)	64	2.57 (.95)	65	2.71 (.95)	66	2.86 (.77)	45	2.61 (.82)	65	2.88 (.82)
gains	Sec.		1.13		--		.92		.57		.82		--		.33		1.21
	Elem.		.87		--		.65		-.10		.44		--		.29		.58

Table 13

Correlations of Ratings on Dimensions of Principals with Each of the Three Teacher Groups

a) Principals with Special Education Teachers

Principals / Teachers		Identification	Program	Evaluation	Communication with: Staff	Communication with: Parents
Identification	r	.67*	.50	.41	.66*	.56
	n	11	11	11	11	11
Program	r	.05	.39*	.12	.31	.11
	n	28	28	28	24	28
Evaluation	r	.15	.24	.11	.09	.20
	n	28	28	28	24	28
Communication	r	-.03	.16	.11	.24	-.09
-with principal	n	17	17	17	15	17
-with parents	r	-.05	.03	-.16	-.05	.07
	n	27	27	27	23	27

** significant at $p < .01$

* significant at $p < .05$

Table 14

Correlations of Ratings on Dimensions of Principals with Each of the Three Teacher Groups

b) Principals with Regular Classroom Teachers

Principals / Teachers		Identification	Program	Evaluation	Communication with: Staff	Communication with: Parents
Identification	r	.16	.32	.20	.31	.36*
	n	29	30	30	27	30
Program	r	.12	.34	.31	.35	.03
	n	28	29	29	26	29
Evaluation	r	.16	.31	.38*	.34	.11
	n	28	29	29	26	29
Communication	r	.13	.42*	.38	.32	.16
-with principal	n	21	22	22	20	22
-with parents	r	.17	.28	.04	.12	.11
	n	30	31	31	28	31

* significant at $p < .05$

Table 15

Correlations of Ratings on Dimensions of Principals with Each of the Three Teacher Groups

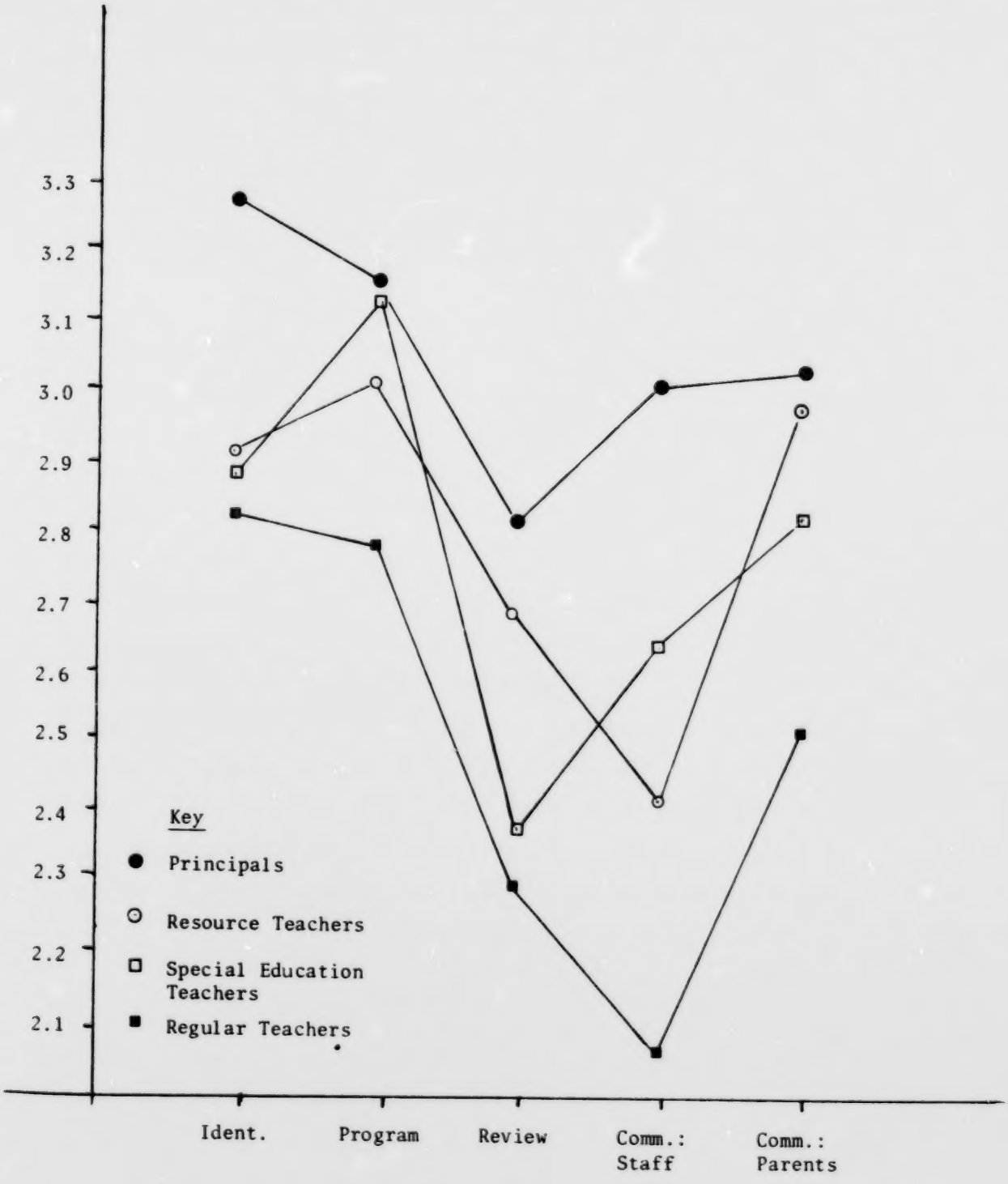
c) Principals with Resource Teachers

Principals / Teachers		Identification	Program	Evaluation	Communication with: Staff	Communication with: Parents
Identification	r	.33	.46**	.42	.37*	.41*
	n	30	31	31	28	31
Program	r	.27	.32	.31	.26	.31
	n	30	31	31	28	31
Evaluation	r	.10	.25	.30	.26	.28
	n	30	31	31	28	31
Communication	r	.07	.03	.00	-.22	-.11
-with staff	n	22	23	23	21	23
-with parents	r	.26	.14	.14	.03	.46**
	n	29	30	30	27	30

** significant at $p < .01$

* significant at $p < .05$

Figure 2. Year 4 Mean Implementation Ratings for Principals and Three Teachers Groups



ratings of principals with the identification ratings of regular classroom teachers. The diagonals therefore show the correspondence between groups in degree of implementation on parallel dimensions. For these analyses, the principals' ratings on degree of communication with their staff is compared with staff ratings on the degree of communication with their principal (not on teachers' communication with staff).

The tables may also be examined for clusters of significant correlations where dimensions tend to be related.

As discussed above ratings on the three dimensions of identification, program and review, appear to be reliable within each of the four groups. It is therefore likely that the patterns of correlations between groups may reflect underlying group characteristics. The principal identification and program dimensions correlate with the identification and program ratings of special education teachers. The principal identification and program dimensions are correlated with those of resource teachers, although these correlations are only marginally significant. Principal identification correlates with all of the ratings of resource teachers. There is a pattern which suggests that the variation in principal ratings on identification is reflected to some degree in all dimensions of both resource and special education staff, but not in regular staff. A shared perspective on program, too, is mirrored in the correlation on the program dimension between principals and special education teachers, and in turn in the program ratings of regular and resource teachers. The ongoing evaluation and review dimensions of principals and regular classroom teachers is also correlated.

b. What relationships exist between the implementation levels of teaching groups?

Tables 16 to 18 display the correlation data between the three teacher groups. In Table 16 high correlations are shown between special education and regular classroom teachers on the identification and program variables. However, the number of special education teachers who have a role to play in the identification

Table 16

Correlation of the Ratings on Dimensions of Special Education and Regular Classroom Teachers

Special Education / Regular		Identification	Program	Review	Communication with: Staff	Communication with: Parents
Identification	r	.50	.45*	.42	.43	.39
	n	10	21	21	17	20
Program	r	.27	.39	-.09	.42	.11
	n	10	21	21	16	20
Review	r	.54	.45*	.28	.31	.55*
	n	10	21	21	16	20
Communication	r	.89*	.27	-.26	.54*	-.13
-with principals	n	6	16	16	16	16
-with parents	r	-.20	.21	-.16	.24	.24
	n	10	22	22	17	21

* signicant at $p < .05$

Table 17

Correlations of the Ratings on Dimensions of Special Education and Resource Teachers

Special Education / Resource		Identification	Program	Review	Communication with: Staff	Communication with: Parents
Identification	r	.60	.50*	.21	.34	.16
	n	9	23	23	16	22
Program	r	.47	.50*	.24	.09	.13
	n	9	24	24	16	23
Review	r	.70*	.41*	.38	.04	.02
	n	9	24	24	16	23
Communication	r	--	.23	-.35	.31	-.12
-with principals	n	4	16	16	16	16
-with parents	r	.30	.44*	.43*	.03	.50*
	n	8	23	23	16	22

* significant at $p < .05$

Table 18

Correlations of the Ratings on Dimensions of Regular Classroom and Resource Teachers

Resource \ Regular Class		Identification	Program	Review	Communication with: Staff	Communication with: Parents
Identification	r	.59**	.66**	.57*	.33	.18
	n	29	27	27	21	29
Program	r	.27	.32	.42	-.02	-.11
	n	29	27	27*	21	29
Review	r	.29	.26	.33	.25	-.17
	n	29	27	27	21	29
Communication	r	-.03	-.01	.24	.15	.30
-with principals	n	22	20	20	21	22
-with parents	r	.34	.20	.11	.08	.21
	n	27	25	25	21	27

** significant at $p < .01$

* significant at $p < .05$

process is small, since most special education teachers receive their pupils after the identification and placement procedures have been completed. Those special education teachers who are involved in identification activities usually have a small allocation of time to consult with the regular teachers or to be involved in an in-school team. Regular classroom teachers' program ratings seem unrelated to any of the special education teachers' ratings (Table 16), as they are to any of the principals' (Table 13), and resource teachers' (Table 18) ratings, suggesting that the regular classroom teacher is relatively immune to the procedures and programs for special education implemented by the principal and special education staff. The two special education trained groups, special education and resource teachers (Table 7) show a much higher correlation with each other's ratings on program delivery and also on identification. Ongoing evaluation and review, however, is poorly correlated.

c. Are there differences between staff groups on implementation patterns in elementary and secondary schools?

Table 11 contains the principal profiles for elementary and secondary panels, and Table 12 contains the teacher profiles. Tables 19 and 20 show the teacher scores presented separately for each of the three groups for Years 1 and 4.

Regular classroom teachers clearly lag behind their peers in both years. As Table 19 indicates, however, the regular classroom teachers commenced the period of Bill 82 implementation with no provisions in place for dealing with integrated exceptional pupils. By 1986, they had shown considerable gains in implementation at both elementary and secondary levels. One dimension still remains to be implemented; regular classroom teachers are not participants in IPRC review meetings, either in terms of attending the meetings or of supplying through others information about the progress of pupils integrated in their classrooms. This suggests that the effectiveness of programs in regular settings is not a priority for IPRC reviews. Integration may largely take the form of placement in a regular class location, rather than placement designed to meet specific learning needs.

Table 19

Mean Implementation Scores (and Standard Deviations) for Elementary and Secondary Schools, for Each of Three Teacher Groups; Year 1

Teacher Group	Panel	Ident. n	Ident.	Program n	Program	Involve. in IPRC n	Involve. in IPRC	Ongoing Eval. n	Ongoing Eval.	Communication with: Staff n	Staff	Principals n	Parents n	Parents
Special Education	Sec.	3	2.00 (.00)	6	2.58 (.58)	4	2.00 (1.35)	6	2.58 (.80)	2	2.25 (1.06)		6	2.17 (1.02)
	Elem.	23	2.26 (.78)	23	2.86 .72	10	3.00 .97	23	2.65 (.92)	15	2.13 (1.13)		22	2.30 (1.01)
Regular	Sec.	12	1.54 (.58)	12	1.46 (.54)	8	1.06 (.18)	12	1.29 (.33)	9	2.00 (.71)		12	1.13 (.31)
	Elem.	13	1.92 (.67)	13	1.62 .77	4	1.62 (1.25)	13	1.54 (.95)	8	2.50 (1.13)		13	1.65 (.66)
Resource	Sec.	6	2.08 (.66)	6	2.75 (.42)	4	3.50 (.71)	6	3.17 (.82)	5	2.80 (.27)		6	2.33 (.88)
	Elem.	3	2.83 1.04	3	2.67 (.76)	1	3.50 (0.00)	3	2.50 (8.67)	2	3.00 (1.41)		3	1.67 (1.15)

Table 20

Mean Implementation Scores (and Standard Deviations) for Elementary and Secondary Schools, for Each of Three Teacher Groups; Year 4

Teacher Group	Panel	Programming						Review				Communication with:					
		Ident.		Pre IPRC		Post IPRC		Involve. in IPRC		Eval.		Staff		Principal		Parents	
		n		n		n		n		n		n		n		n	
Special Education	Sec.	2	3.25 (.35)	0	--	7	3.14 (.69)	7	2.86 (1.31)	7	3.51 (.73)	4	3.25 (.50)	3	2.00 (1.00)	7	3.00 (1.12)
	Elem.	11	3.32 (.56)	7	3.00 (.65)	22	3.20 (.50)	22	2.47 (.99)	22	2.82 (1.03)	22	2.75 (.86)	13	2.77 (.73)	21	3.02 (.80)
Regular	Sec.	9	2.61 (.65)	5	2.60 (.89)	8	2.50 (.85)	9	1.67 (1.00)	9	2.22 (.79)	8	2.56 (.82)	4	1.25 (.50)	10	1.40 (.70)
	Elem.	22	2.87 (.77)	17	2.65 (.70)	21	2.74 (.75)	20	1.55 (.69)	21	2.33 (.89)	22	2.75 (.57)	17	2.29 (.79)	22	2.55 (.75)
Resource	Sec.	8	3.12 (.88)	5	2.70 (.45)	8	3.31 (.75)	8	3.06 (.86)	8	3.06 (1.18)	7	2.93 (.54)	5	1.80 (.87)	6	2.50 (.89)
	Elem.	21	3.29 (.56)	15	3.20 (.53)	22	3.23 (.65)	22	2.80 (.91)	22	2.95 (.84)	22	3.09 (.84)	15	2.83 (.88)	22	3.09 (.84)

This is borne out by the scores of regular classroom teachers particularly at the secondary level, on other dimensions of implementation.

Special education and resource teachers had reached considerably higher levels of implementation by 1986 on both elementary and secondary panels. Review and parental involvement at the secondary level show remarkable improvement compared to 1982 data. Communication between staff at the secondary level has also improved, although communication with the principal remains weak to non-existent. This can be explained in part by the nature of secondary school staff structures, where principals often take the role of manager and delegate staff support and development to vice-principals or department heads.

d. How does the Franco-Ontarian school compare to overall school ratings?

The principal and teacher interviews were translated into French (Appendix C), and conducted by a French-speaking interviewer, Dr. Bob O'Reilly of the University of Ottawa.

Three interviews were conducted in one French-language school. These were with the principal, a resource teacher and a regular classroom teacher.

Since only one francophone school participated in the study, one cannot generalize the findings to the six boards in the study. In order not to disclose the identities of individuals, the numerical results will not be described in detail.

All three staff members expressed philosophies and actions which were equal to or above the Year 4 means of the other teaching professionals in this study. The principal and resource teacher expressed a desire to establish a collegial climate in the school where the responsibility for exceptional students was shared by all members of staff. The identification, program and review procedures were rated at Levels 3 and 4, as good to excellent.

The francophone nature of the school gave rise to three difficulties in delivering special education programs and services.

i. Parent communication. All interviewers agreed that communication with parents was less than ideal. There were no French-language materials to assist francophone parents in understanding the board's philosophy and procedures. The parent guide had not been translated into French. Parents were not aware of the implications of having their children referred to special education.

ii. Assessment and resource support. The board-level team assigned to the school to conduct assessments and to assist the staff in programming were all French-speaking. Two of the three, however, did not understand French curriculum and could not offer programming suggestions. The third member, a social worker, was therefore elected by default to advise the teachers and principals of the outcomes of assessments, and to suggest program and service needs. The staff viewed this as unsatisfactory and not very helpful.

iii. French curriculum materials. No French materials for special education were available. The staff were trying to gather some through contacts in Quebec, but at the point of interview felt ill-equipped to deal with the specialized learning needs of French-speaking children.

5. Funding

The original contract called for a study of the cost allocations to schools to conduct the range of programs and placements offered within each model of delivery. The question was whether high implementing schools used more, or fewer resources than low implementing schools. We proposed to undertake this study by gathering data on the percentage of exceptional pupils served, the proportion of special education resource budgets used by given schools, and the cost and time of personnel in the school.

In order to conduct this study the investigators met with superintendents of special education in three of the four boards. We asked for the information in Table 21.

Table 21

Factors Included in Cost Allocation Practices for Special Education

Step 1	Summary of expenditures by board. Basic education costs/1000 pupils Special education costs/1000 pupils Local special education costs
Step 2	Staff assignments by board - Total program staff - average cost (F.T.E.) - Special education staff (F.T.E.) Itinerant program staff System support staff Administrative support (F.T.E.) - (percentage time spent in special education activities) - Total staff allocation/1000 pupils, regular and special education - Average cost of above
Step 3	IPRC costs Number of pupils processed - initial referrals - review referrals Referral meeting time x no. participants Cost of pre-referral assessments
Step 4	Development costs - Curriculum development - Staff development: school level board level - Conferencing, inter and intra-system visits - Development cost summary (divided by number of pupils)
Step 5	School by school breakdown (Requiring a new record-keeping system)

In 1985, O.A.E.A.O. and A.L.S.B.O. proposed data collection systems to school boards that were designed in conjunction with Ministry of Education and school board finance and special education personnel. The resulting proposal was designed to permit school boards to monitor their own costs, to compare figures to other boards, and to collect financial information on special education that would facilitate provincial planning. The list of items to be compiled is represented in Steps 1 and 2 of Table 21. The latter parts of Step 2 to Step 5 require special compilations of costs on a time-sampling basis.

The three school board superintendents whom we approached reacted as follows.

One very large board compiles basic information for the Ministry of Education September board reports, for general legislative grant purposes. If this information was broken down for the three regions of the board, the special education personnel were unaware of it. This board does not yet have in place a computer-supported financial planning system. Until that occurs, all financial compilations must be done by hand, severely limiting the record keeping, the available data base and the potential for planning. The administrators with whom we talked would be pleased to see a major study by the ministry to pinpoint the cost effectiveness of their schools' use of resources. They would be willing to ask individual schools to keep records of their resource used, their in-service initiatives and the number of pupils processed, both exceptional and resource, and the time allocated to them. However, this could not be done as a voluntary activity, but would require the force of ministerial compliance.

A second board set about collecting the information which we requested. The assistant superintendent of special services undertook the task of asking various departments to supply the requested information on our behalf, and compiling it. The outcome was that most of the information was unavailable since it had never been collected. Data from ministry reports was willingly shared with us. However, no records are kept of the number of pupils and the time spent by special education-supported school personnel. It is not clear, therefore, whether the high implementing school, as operationally defined in this study, is using less or more of the available allocation.

No record at all is kept of in-service activities with teachers at the school level; the costs of board-level conferences were available but without figures for number of participants. This school board has extended itself on many occasions on our behalf. We appreciated the time and effort put into this task, and we did not think it was reasonable to ask further record keeping to be set up for us.

The third school board gave us their formally published financial data which covers Step 1 and parts of Step 2 of Table 21. As in the case of the other boards, these data are already available to the Ministry of Education.

In short, school boards are aware of the need for more detailed cost accounting of their special education programs and services, but are not yet compiling the necessary data. Such an undertaking would be expensive, and would probably require a ministry directive to be undertaken. The task of examining the cost effectiveness of high implementing schools would be complicated by the need to include data on non-IPRC'd pupils, and to examine the ratio of staff to pupil support in light of such factors as increased integration and decreased referral to an IPRC. School factors such as level of need (economic location, second-language proportions) and geographic location would be taken into account. At present, school boards are unable to supply these data.

APPENDIX B3.

RESULTS - IMPACT

The impact results section is structured to address the following questions in the order presented below:

1. Reliability of ratings
   - interjudge reliability
   - interrelationship of impact variables
2. Nature of Teachers' Concerns
3. Number of students IPRC'd.
4. Teacher Goals

   Are teachers' goals specific and perceivable in terms of student behaviours?
5. Relatedness of Teacher Goals to Teacher Concerns

   Are teachers' goals appropriate to their concerns for their students?
6. Teacher Effort

   What do teachers do to facilitate the meeting of their objectives?
7. Relatedness of Teacher Effort

   How relevant are teacher practices to the instructional needs of their students?
8. Teacher Use of Available Resources

   How much use do teachers make of school consulting resources?
   i. Administration - Principal/Vice-Principal
   ii. Peers

iii. School system consultants

iv. External resources

9. Communication with Parents

To what extent do teachers involve parents in programming via the mechanism of close communication?

10. Individual Pupil Plan

Is instruction based on a written individual instruction plan?

11. Relationship between Implementation and Impact Dimensions

Results - Impact

1. Reliability of Impact Ratings

Procedures outlined in an earlier section dealing with the reliability of implementation measures were not employed to determine the reliability or internal consistency of the impact variables since it was not presumed that a single common characteristic was being measured. Rather, each of the impact variables is seen as being part of separate domains of activites. Two types of correlations were conducted however: 1) to ensure that the impact variables were being rated in a reliable fashion, and that rater bias or any other characteristic was not a determining factor in the final ratings, an interjudge reliability coefficient was calculated on two independent ratings of 24 teachers. The interjudge reliability coefficient of 0.83 suggests a high level of correspondence between raters of the impact variables; 2) the ratings of each variable were correlated with the ratings of every other variable across teacher groups to determine if any relationship existed between impact variables. The two significant correlations produced by the second analysis in which there was an appropriate sample size could be expected by chance alone and therefore are not reported.

There are a number of possible interpretations of these results; 1) the use of the 4-point rating scales utilized in conjunction with the impact variables may not be sensitive enough to pick out variations in teacher performance in those areas, thus reducing and limiting the range of possible ratings, and 2) the numbers of teachers within each teacher category, for whom complete sets of data were available with reference to the five impact variables, are relatively small, thus necessitating very high order correlations in order for these correlations to reach significance. It must be left to further research, which would employ refinements to the variable definitions and to the impact rating scales, to determine which of these interpretations is the correct one.

2. The Impact Variables

a. Nature of Teachers' Concerns

Both within and across the school boards contributing information to this component of the study, the most prevalent type of concern expressed by teachers pertained to the academic performance of the nominated students. Across the three teacher groups academic concerns ranged from 30% - 58% of all concerns expressed. Behavioural concerns, e.g. stubbornness, manipulativeness, negativism and acting-out behaviour accounted for 25% - 44% of the concerns expressed followed by familial/environmental, 10%-22%, emotional, 5% - 13%, and physical/health concerns, 1%. In one school board, the relationship of academic and behavioural concerns was reversed with reference to the group of regular class teachers. Concerns with fighting behaviour, classroom disruptions, manipulative pupils and attention-seeking behaviour exceeded academic concerns 39% to 29%.

b. Number of Students IPRC'd

A total of 172 students were nominated as being of concern by all of the teachers interviewed. However, data pertaining to whether or not a student had been through the IPRC process were available on only 105 students. Of these approximately 60% had been considered by an IPRC and 40% had not. In such case in which an IPRC had been held, each student in question had been designated as being an exceptional pupil.

c. Teachers' Goals

Are teachers' goals specific and perceivable in terms of student behaviour?

Once teachers had nominated 2 or 3 students and had expressed the nature of their concerns regarding each of the students, they were asked to describe in detail what their instructional and/or behavioural goals were for those students. These

goals were recorded and then rated according to specificity and relatedness to the teacher's concerns.

Analysis of the data pertaining to goal specificity reveals a general dearth of appropriate, assessment-based instructional/behavioural objectives. While it was evident that some teachers were working within a framework of very specific, skill-oriented goals, this proved to be a rare exception to the general nature of goals established by the teachers interviewed. In all of the schools teachers' goals were typically vague in nature and direction and were stated in broad, general terms (mean rating 2.098). The goals defied clear and careful implementation of programming elements designed to meet the goals, and made any objective measurement or assessment of goal accomplishment virtually impossible. The following examples reflect the vagueness and lack of specific skill relatedness of teachers' goals; "to increase his awareness of creativity in the affective domain"; "to prepare him to do what he chooses to do"; "to make him realize he has potential"; "to improve his physical well-being"; "to improve his reading (or writing or spelling)". Within this general pattern of vagueness and generality in respect to instructional goals exhibited by approximately 99% of the teachers, slight variations in degrees of vagueness are evident between types of teachers in each board and across boards

In only two cases across all teachers and all boards did the goals expressed contain reference to specific, measurable goals pertaining to such academic skills as one or another phonetic or structural analysis skills, particular comprehension, spelling or writing skills, specific math concepts or skills, etc. Similarly, behavioural objectives failed to specify the behaviour to be changed.

A consistent pattern is evident when one examines the goals expressed by the regular class, special education and resource teachers. Regular classroom teachers in each board exhibited the highest degree of vagueness in their goals for their students (mean rating 2.05) with such objectives as "to get him to apply himself"; "to expose him to more challenge"; "to give him survival skills"; "to settle him

down". Slightly less vagueness and more emphasis on academic areas, albeit still in board terms, was characteristic of the goals cited by resource teachers (mean rating 2.08) and special education teachers (mean ranking 2.15), who tended to set the following type of goals; "to improve his organization skills"; "to improve his work habits"; "to improve his reading"; "to improve his attention span"; "to get him to develop some basic math skills"; "to bring him up to grade level in reading"; "to develop oral language skills". These differences between the special education/resource teachers and regular class teachers may reflect a greater awareness on the part of the former of the need for specificity in goal setting for students, but the translation of this awareness into practice (dimension - Teacher Effort, Table 22) falls short of what is typically considered to be the development of appropriate instructional objectives.

d. Are teacher goals appropriate to their concerns for their students?.

Although all three types of teachers expressed goals that were broad and generally unmeasurable, there was a very high level of correspondence between the overall focus of the stated goals and the particular concerns that were indicated for particular students (Table 22); (mean rating - regular teachers, 3.32; resource teachers, 3.37; special education teachers, 3.49). In other words, if a concern was in regard to the student's "impulsivity and lack of emotional control", the goal to assist the student would be "to get him to think before he acts so he can control his outbursts". Or, a concern about a student's immaturity, dependence and lack of confidence would generate a goal designed to improve self-concept and ability to work independently.

Close connections between teacher concerns and goals are in evidence across all boards (mean rating 3.39). However, in approximately 35% of the cases (equally distributed across the three types of teachers), serious concerns were expressed by the teachers regarding their students, but no goals were described with preference to any attempt on the part of the teacher to deal with the concern. Similarly, in about 30% of the cases, teachers suggested that they had particular goals for a

Table 22

Means (and Standard Deviations) of the Impact Dimensions for Three Teacher Groups

Teacher Group	Goal Specificity		Goal Relatedness		Teacher's Effort		Relatedness of Effort		Communication With Parents	
	n		n		n		n		n	
Special Education	22	2.16 (.58)	22	3.35 (.77)	22	2.52 (.62)	22	3.48 (.72)	21	2.95 (1.12)
Regular	25	1.98 (.71)	23	3.24 (.85)	25	2.22 (.51)	23	3.05 (.95)	26	2.42 (1.36)
Resource	23	2.01 (.69)	23	3.37 (.57)	23	2.52 (.58)	23	3.36 (.71)	21	2.76 (1.22)

student but had not previously described any area of concern with which the goal(s) could be connected.

e. What do teachers do to facilitate the meeting of their objectives?

This aspect of the Impact component of the study examines the approaches teachers reported they employed in order to address the concerns they had about their students. In other words, the teachers were asked to describe in detail the approaches, methods, strategies, etc. they used to attempt to achieve the goals they had established for their students.

The particular instructional/behavioural objectives that are set by a teacher in respect to individual students will presumably influence the nature of the instructional process that is developed for those students, the results of the analysis of teacher effort are in line with the results reported on teachers' goals. The vague, general, non-specific, generally unmeasurable nature of teachers' goals is reflected in similarly vague, general, non-specific teaching approaches.

The mean ratings of the "teacher effort" variable were: regular teachers, 2.24; resource teachers 2.45; special education teachers, 2.57. While the variations in approaches initiated by these mean ratings are not statistically significant, there are some interesting qualitative differences across types of teachers.

The extremes of generality are represented by the descriptions of regular teachers whose approaches include, "put him on a homework book" (a popular technique across all boards); "I talk to him and tell him to work harder"; "try to establish a relationship with her"; "I keep my expectations low"; "keep him in for extra help"; "I refer him to the resource teacher". Resource teachers and teachers of special education describe their approaches in the following ways: "I use a multisensory approach"; "I put him on the Distar program" (or other packaged program such as the Peabody Language Kit or Bridge Reading etc.); "I work on oral communication skills"; "I give him one-to-one attention"; "I put his program on the computer".

It would appear from these results that teachers generally do not have familiarity with techniques for formulating instructional objectives and conducting a task analysis in order to specify exactly what they need to teach a particular child and what specific procedures, strategies and approaches to employ in that teaching.

f. How relevant are teaching practices to the instructional needs of their students?

Analysis of the ratings of the correspondence between the teachers' teaching approaches and concerns expressed about their students suggests a relatively high level of relatedness overall (mean rating 3.35). A breakdown of the mean rating by teacher status indicates minor variations between teacher groups (regular teachers 3.27 resource teachers 3.35; special education teachers 3.46)

These data suggest that teachers generally are aware of what their students need to be taught and structure their programming accordingly with a focus on student needs, even though the programming itself lacks precision, clarity and is inconsistently applied.

g. How much use do teachers made of school consulting resources?

An important variable in the consideration of "impact" is the extent to which teachers utilize resources available to them within the school and within the board and from the surrounding community. Such contacts could be expected to influence the teachers' understanding of student needs and the nature of the instructional program that was planned and implemented. Teachers were asked to indicate with whom they consulted to assist them in their goal setting and in their efforts at meeting the instructional/behavioural needs of their students. Data were analysed with reference to contacts with (i) the principal/vice-principal, (ii) with their peers (resource teachers, special education teachers and regular class teachers) in their respective schools, (iii) with the variety of educational psychological, social work, etc. consultants who provide board-wide consultation, and (iv) with community agencies such as C.A.S., treatment centers, etc. Data pertaining to the

perceived usefulness of the various contacts on the parts of the teachers were also gathered.

In-school Resource Contacts

i. Administration-Principal/Vice-Principal

Overall teachers do not appear to see their principals/vice-principals as sources of valuable assistance with reference to students about whom the teachers have some concerns. The mean ranking for all teachers regarding the frequency of principal contacts was 1.96 with approximately 16% of teachers indicating no contact with principals and 84% stating that their contact with their principal was essentially a one-time information-sharing session.

Resource teachers report slightly more contact with principals (mean 2.34) than do special education and regular teacher (mean 1.85 and 1.77 respectively), but none of them finds the contact to be more than moderately useful in providing additional insights or valuable suggestions for programming (mean 2.00 for resource teachers and regular teachers, 2.20 for special education teachers).

ii. Peers

The teachers' perception of their peers as valuable resource people (mean frequency rating, 3.21) stands in dramatic contrast to their impression of their principals in that role. It would appear that teachers look to other teachers to express their concerns about students and to exchange ideas and share experiences with regard to programming for their students and find those interactions to be moderately to very useful in assisting them with their students (mean usefulness ranking, 2.72). Very little variation in mean rankings of frequency and usefulness of contact with peers is evident across the three teaching groups.

Board Resources Contacts

System resource consultants appear to be on a par with school principals both in terms of the frequency of contacts made by teachers in respect of their students and the perceived usefulness of that contact. The overall mean frequency of contact of 1.43 suggests that teachers typically do not contact system resources such as the school psychologist, program consultants, social worker, or speech and language consultants, etc. for consultations beyond the initial identification and placement decisions, that is, these resources are not tapped for suggestions as to teaching strategies, programming materials or evaluation procedures. Further, when contact was made it was of the single contact nature, with little, if any, follow-up. However, contacts that were made with such resource people were found to be not useful to moderately useful by special education teachers (mean rating 1.83), not useful by regular classroom teachers (mean rating 1.30) and resource teachers (mean rating 1.37).

External Resources

Data with reference to communication with community agencies were too sparse to allow for any meaningful analysis and discussion.

h. To what extent do teachers involve parents in programming via the mechanism of close communication?

For each of the students they nominated for discussion the teachers were asked to describe the nature of the communication that had been established with the parents. Fifty-seven per cent of the regular teachers, 47% of the special education teachers and 79% of the resource teachers had either no contact with the parent or a minimal type of contact in the sense that it was associated only with the formal requirement of teacher-parent interviews at report card times. The type of parent communication that is characterized by informal notes and telephone calls from the teacher, occurring on an irregular basis when the teacher felt it was necessary, or by occasional contacts initiated by the parents was associated with

approximately 32% of the special education teachers, 31% of the regular teachers and 10% of the resource teachers. A systematic, ongoing type of communication which kept parents fully informed of their child's academic and or behavioural performance in class via daily, weekly or monthly written or telephone contacts was evident in 21% of the special education teachers, 11% of the regular teachers, 10% of the resource teachers. These results reflect the relatively low priority given by all teachers across all boards to close communication with the parents of their students.

i. Is instruction based on a written individual instructional plan?

Teachers were asked to indicate whether or not an I.P.P. existed for the nominated students (Table 23). If one had been developed, the teachers were then asked to categorize the I.P.P. as either informal, "I've got it in my head", or a formal one which was actually written down. Among students who had not been through an IPRC, 66.6% had no I.P.P., 2.3% had an informal I.P.P. and 30.9% had formal, written plans. In other words, an I.P.P. was prepared for approximately one third of the students,even though they had not been referred for consideration to an IPRC.

For students who had been IPRC'd, 30% had no I.P.P. developed for them, 12.7% had an informal plan, while 57.1% had formal plans, that is to say, that individual pupil plans had been prepared for only two thirds of the students who had been IPRC'd and found to be exceptional.

3. Relationship between Implementation and Impact Dimensions

a. Principals' implementation levels and teachers' impact.

Correlations were conducted between the seven principals' ratings on each of the dimensions for implementation, and the six dimensions of impact. The results were disappointing: only one correlation reached significance. Principals' ratings on review correlated with the specificity of teachers' goals at $r = 0.49$ ($P < 0.05$).

Table 23

Numbers and Percentage of Pupils for Whom an I.P.P. was Prepared

		I.P.P. Prepared?			
		No	Yes		
IPRC'd			Formal	Informal	Total
NO	n	28	13	1	42
	%	66.6%	30.9%	2.3%	
YES	n	19	36	8	63
	%	30.1%	57.1%	12.7%	

However, in a matrix of seven by six correlations, one would expect at least two correlations to reach significance by chance alone. It is therefore not meaningful to interpret this single correlation.

There is therefore no evidence in the data to suggest that the level of implementation of special education delivery in the school as described by the principal is related to the ratings of impact given to teachers.

b. Teachers' implementation levels and teachers' impact.

Table 24 presents correlational data with regard to the relationship between the implementation levels assigned to the teachers in each of three groups and their impact ratings.

Within the special education teacher group, only three correlations reached significance. Goal specificity correlated positively with post IPRC programming implementation and with the teachers' level of communication with parents. The level of communication with the principal correlated significantly with the relatedness of the teachers' effort. However, the overall pattern of correlations showed no significant relationship.

The results of regular classroom teachers were similar. Only one correlation between impact and implementation dimensions reached significance and this was with a group of 3 people.

The resource teachers provided a much more interesting pattern of correlations (Table 24). One dimension of implementation, communication with the principal, and one of impact, the relatedness of program goals to the teachers' concerns, correlated with several of the corresponding dimensions. Communication with the principal was significantly correlated with goal relatedness ($r=0.65, p<0.01$), with effort relatedness ($r=.46, p<0.05$) and with communication with parents about the two nominated children ($r=0.56, p<0.05$). Goal relatedness on the impact dimensions also correlated with programming prior to ($r=0.59, p<0.01$) and

Table 24

Correlations Between Resource Teachers' Ratings on the Implementation and Impact Dimensions (n = 19)

Implementation Dimensions	Impact Dimensions: Goal Specificity	Goal Relatedness	Teacher Effort	Relatedness of Effort	Communication With Parents
Identification	.30	.11	-.12	-.04	.15
Program Pre-IPRC	.25	.59**	.19	.13	.30
Post-IPRC	.09	.49	-.14	.08	.29
Involvement in IPRC	-.12	.32	-.05	.19	.26
Evaluation	-.02	.19	-.21	.22	.08
Communication with					
Staff	.17	.48*	-.23	.23	.22
Principal	.13	.65**	.27	.48*	.56*
Parents	-.05	.27	-.10	-.27	.27

** significant at $p < .01$

* significant at $p < .05$

following the IPRC ($r=0.49, p<0.05$) and to communication with staff ($r=0.48, p<0.05$). For resource teachers, communication with the principal seems to be significantly related to the provision of program to the students specified. Goal setting and program philosophy, and goal setting and communication with peers are also significantly related.

APPENDIX B4

IPRC STUDY

Method

In order to assess the types of IPRC organizations that have resulted from the amended Education Act, a survey of the Identification Placement and Review Committee (IRPC) was sent out to 186 school boards in Ontario. The survey was addressed to the central board level administrator responsible for the organization of special education services for each board, and it was requested that the questionnaire be returned by the middle of September, 1984. The questionnaire focused specifically on the following categories of information:

- the organizational structure of boards' IPRCs;
- the procedures established in school boards to ascertain the smooth functioning of these committees;
- the outcome of IPRC meetings in terms of declaration of exceptionalities; and
- the extent to which parents were invited to, and participated in, the process of an IPRC.

The questionnaire was aimed at identifying the organizational structure used by school boards to develop their special education referral-identification-placement-review process.

- organization by geographical unit;
- organization by exceptionality;
- organization by panel;
- combination(s) of a, b, and c.

Subsequent to the identification of the IPRC organization(s) that a board was employing a number of questions were posed to obtain specific information about the board's IPRC process during the 1983-84 school year, and in some cases the 1982-83 school year as well. The questionnaire was further divided into items that relate specifically to each model the board

professed to have, and to more general questions affecting the overall workings of the IPRC process as outlined in Ontario Reg. 554/81. To supplement information gathered in the questionnaire, additional data were obtained about the board's school population, size and regional location from the Directory of School Boards, 1984, a Ministry of Education publication.

Particular areas explored by the questionnaire were:

1. Number of pupils processed at IPRCs per 1000 school population.
2. Time spent prior to the IPRC meeting on a case as a percentage of the total number of person hours for the IPRC case.
3. Ratio of the number of elementary pupils who are deemed exceptional to the number of pupils enrolled in remedial programs.
4. Method of parents' initial involvement in the IPRC process.
5. The attendance patterns of IPRC meetings.

The 'urbanization' or population density of school boards was considered to be an important variable relative to its special education program delivery. Information regarding the level of school boards' urbanization was not available from the Ministry of Education. There was, however, a need to relate the findings of the questionnaire to a factor reflecting the province's demography. Ontario has a population of nearly ten million, and a very unevenly distributed school population of over two million (1,132,772 in the 1984/85 school year). The organization of its two independent public and separate school systems that overlap geographically, but often not in student population, results in school boards with vastly different population densities. This is perhaps not directly due to specific urbanization, or even the growth of suburban communities, but to an uneven growth pattern determined by prevailing socio-economic and mobility factors. In order to establish the urban or rural nature of each school board, a percentage could be calculated of the proportion of urban students in each board (with the obvious urban and rural boards excluded), thereby determining the percentage of urbanization for each school board. In the absence of the availability of this information,

the following method was used to obtain a population density factor (P.D.F.) for each of the respondent boards. The ministry was able to provide a computer printout of its boards and the areas in hectares of every municipality that belonged to each board. Using this data, a total figure in hectares was calculated for each school board, which in turn was converted to square kilometers and divided by board's population divided by 1000. The resultant figure is an accurate estimate of each board's school population density. In a number of instances this value is artificially raised because hectare values were unavailable for unorganized areas in the northern part of the province and Indian Reserves.

The P.D.F. is an average for each board, which reflects a potentially important factor that may be expected to influence the structural organization of the IPRC process in a school board.

Since a number of respondents failed to answer critical items on the questionnaire, and even those surveys where most questions were filled in indicated only pupils identified during the 1982/83 and 1983/84 school year, more accurate information was necessary regarding the number and types of exceptional pupils serviced by school boards. This information was obtained from the Ministry of Education through the school boards' September '84 report. Specifically, information about the number of exceptional pupils according to the ministry's category definitions and the number of pupils enrolled in contained, and withdrawal special education classes, and remedial language classes was obtained. Information obtained from the September report was then combined with school population data to compute an incidence rate for each exceptionality according to the ministry's definition of exceptionalities. These values provided a basis of comparison with a number of variables in support of the relative placement of boards on the prevention/restorative continuum.

Results

The results of the questionnaire were collated and analysed first to determine the various patterns in the IPRC organizations and processes adopted by the responding boards. Second, questionnaire items were related to four major variables, namely to the number of students in boards (i.e. the board's population size), to the number of students in the board relative to the

geographic region covered (i.e. population density), to the school board's geographical location in the province, and to the types of school boards.

The questionnaire was returned by 52% (91 out of 186) of school boards (excluding 11 schools with no school population for the 1983/84 school year). There were, however, a number of items on many questionnaires that were left answered. The average response rate to individual items was 38%. The response rates for various categories of boards are summarized in Table 1.

Table 1: Demographic data regarding the school boards which responded to the questionnaire.

Type of school board	Responded	Total	%	Location by Region	Responded	Total	%	Board Population	Responded	Total	%	Number of respondents by boards' p.d.f.	
Board of Education	49	77	64	Northwestern	11	34	32	Up to 1,000	12	57	21	Up to 1 pupil/km(sq)	
Country & District R.C.	31	49	63	Midnorthern	10	25	40	1,000 - 10,000	42	66	64	1-3	
Secondary School Boards	1	1	100	Northeastern	15	29	60	10,000 - 20,000	19	31	61	3-5	
District School Area Boards (Public)	4	27	15	Western	13	25	52	20,000 - 50,000	12	15	80	5-10	
Separate School Boards	3	10	30	Central	30	52	58	Over 50,000	6	6	100	10-50	
Protestant Separate School Boards	1	2	50	Eastern	12	21	57					Over 50	1
Canadian Forces Bases and Stations	1	11	9									(no information)	
Hospital & treatment Centres	1	8	13										

Total number of respondents: 91.
Total school population represented by respondent boards: 1,274,081.
Percent of school population represented by respondent boards: 60%.

IPRC Organization (Questions 1 and 2)

The first item of the questionnaire sought to identify the model of IPRC organizations used in the respondents' school boards. Since a wide variety of structural arrangements exist across the province, the questionnaire presented four prototype models in anticipation of

encompassing the bulk of the prevalent organizational patterns. The four organizations are as follows:

1. IPRC organization by geographical unit - geographical model

   IPRCs are organized according to some prior geographical structures within the school board. This model was seen to be operational at the central board level, area or family of school level, or at the school level.

2. IPRC organization by exceptionality - exceptionality model

   IPRCs are organized to deal with specific exceptionalities. This model was seen to be operational for a single or a cluster of exceptionalities related by frequency of occurence or highly specialized services, for the entire school board.

3. IPRC organization by panel - panel model

   IPRCs are organized for students in the elementary panel, senior elementary/junior high cluster, and the secondary panel.

4. Combination model

   Given the anticipated variety of organization patterns, this option was provided to respondents whose IPRC organizations were seen as a combination of some of the above three models.

The results indicate that there is a wide variety of ways in which the legislation and its associated regulations pertaining to the IPRC have been put into practice. The 91 school boards reported the existence of 184 IPRC structures. These 184 IPRCs can be grouped into 26 different IPRC types based on the previously described models of IPRC organizations namely, geography, exceptionality, panel and combination. This task involved an interpretation of the respondents' description of their own organizations, especially those perceived to be in the combination model. Committees arranged to meet the needs of specific exceptionalities were placed in the exceptionality model category as long as their area of jurisdiction was at the central board level. Others, such as the IPRC for certain exceptionality(ies) at a family of school level, were considered to be a combination model. The 26 types of IPRCs and their frequencies of occurence are summarized in Table 2. In order to condense the number of IPRC

types found in Table 2, IPRCs in the exceptionality and combination models were rearranged according to the incidence rate for the exceptionality they were to consider. Incidence rates based on numbers of exceptional pupils reported by respondent school boards on their September '84 report are summarized in Table 3. Those IPRC structures dealing with more than one exceptionality and a wide range of incidence rates were placed into the higher incidence rate category. The results of this categorization are summarized in Table 4.

Table 2: IPRC Types reported in questionnaire.

IPRC Types	Number of times reported	Percentage of total (184)
Geography Model		
-Central Board Level	44	24.0
-Area-Family of Schools Level	22	12.0
-School Level	71	39.0
Exceptionality Model		
-Trainable Mentally Retarded	3	1.5
-Behaviour	4	2.0
-Autism	1	0.5
-Hearing Impaired	2	1.0
-Language and Speech Impaired	1	0.5
-Specific Learning Disability	2	1.0
-Communication	1	0.5
-Educable Mentally Retarded (G.L.D.)	1	0.5
-Gifted	4	2.0
-Intellectual	1	0.5
-Physical	1	0.5
-Visually Impaired	1	0.5
-Physical and Multiple	1	0.5
-Multiple	1	0.5
-Trainable Retarded, Hearing, Physical, Visual, Gifted and Behaviour	1	0.5
-S.L.D. Trainable, Retarded, Hearing, Visual and Physical	1	0.5
Panel Model		
-Elementary	8	4.0
-Secondary	6	3.0
-Grades 7 - 8	1	0.5
-Grades K - 6	1	0.5
Combination Model		
-Hearing, Severe Language and Physical-Metro	2	1.0
-Intellectual for Family of Schools	1	0.5
-Trainable Retarded, VRS and Autism for Family of Schools	2	1.0
Total	184	

Table 3: Incidence rates of exceptionalities per 1000 pupils based on September '84 Reports.

Exceptionality	mean	maximum	median	SD
Behaviour	4.70	22	3.09	4.92
Autism	0.26	10	0.00	1.18
Hearing impaired	0.77	4	0.57	0.82
Learning disabled	31.7	124	29.03	22.24
Speech & language	6.30	43	3.06	8.29
Gifted	8.40	54	4.59	10.00
Visual	0.34	5	0.19	0.62
Orthopaedic	0.60	5	0.38	0.90
Multiple	1.60	17	0.78	2.56
Educable retarded	14.2	115	10.2	15.79
Trainable retarded	3.20	14	3.41	3.38

Table 4: Reported IPRC types grouped by models.

IPRC Types	Number of Occurrences	Percentage of total (184)
Geography Model		
-Central Board level	44	24
-Area - family of schools level	22	12
-School level	71	39
Total Geography Model	137	75
Exceptionality Model		
-Low frequency exceptionality	16	9
-Medium frequency exceptionality	5	3
-High frequency exceptionality	10	5
Total Exceptionality Model	31	17
Panel Model		
-Elementary	10	5
-Secondary	6	3
Total Panel Model	16	8
Total	184	100%

The reported 184 IPRC structures were then grouped into 26 IPRC types. It is important to define the distinction between an IPRC model and an IPRC type. An IPRC model refers to the previously outlined three overall organizational frameworks presented in the questionnaire, that is, by geography, by exceptionality or by panel. In addition, there is a fourth combination model that reflected a combination of the other two or three frameworks. An example of the latter would be an IPRC established to deal with behaviour exceptionalities for a family of schools. A type of IPRC, on the other hand, includes the number of different IPRC types within one model. For example, if a school board establishes five IPRC types according to the five exceptionality categories defined by the ministry, this would represent the use of five types of IPRCs within one model (i.e, Exceptionality). Different types of IPRCs within the models are listed in Table 2. Within the geographical model a board may have one, two or three types, namely at the central level, family of schools level or school level. Within the Exceptionality

Model a board may have any one or more of the groupings listed in Table 2. Similarly, for the panel model there are four types of IPRCs that may occur depending on the divisions selected by the school boards.

The results of the questionnaire showed that school boards used from 1 to 11 different types of IPRCs. Table 5 shows the summary of the number of IPRC types (and models) deployed by school boards to meet the requirements of the special education legislation and subsequent regulations.

Table 5: Number of IPRC types employed by respondents.

	BOARDS' PUPIL POPULATION					
Number of[1] IPRC Types	0 - 1,000	1,000-10,000	10,000-20,000	20,000-50,000	more than 50,000	Total
1	8	19	4	3		34
2	4	15	11	7	1	38
3	1	7	3	1	3	15
More than 3	1	1	2			4
						(91)

[1]Note: Number of IPRC types can mean either the use of a number of models (e.g. 1 IPRC for TMR pupils, and 1 IPRC for every family of schools), or the use of a number of IPRC types within 1 model (e.g. 1 IPRC for every school and 1 central level IPRC) or a combination of both models and types

Nearly 80 per cent (79.1%) of the 91 school boards employ one or two different types of IPRCs, while only 4 out of the 91 have more than 3 IPRC types operating within their jurisdictions. The questionnaire did not ask on a case by case count for the actual number of IPRCs in operation, rather it focused on the models of organization. Clearly, a school board employing the (geographical) central level IPRC model as a sole method of handling all identification, placement, and review of its exceptional pupils, would only have one sitting IPRC which processes all the cases. On the other hand, a school board that has arranged (geographical) school level IPRCs to handle its identification, placement, and reviews, would still have only one model IPRC, but there would be as many committees as there are schools within the board.

Due to the large variations in terms of the numbers and types of IPRCs used by school boards, analysis of the data is presented first by the number of IPRCs deployed by a school board, second, as the province-wide summary of the 184 IPRCs reported. The number and types of IPRCs were in each case related to the school boards' school population size, a population density factor, the school boards' geographical location in the province, and the types of school boards.

Boards Using Only One IPRC Model

In 33 of the 34 boards using one IPRC type, the model used was one or another form of the geographical model. In this arrangement, the school level IPRCs dominate (25 or 71%), the central level IPRCs are found in 7 boards (20%) and the area/family level occurs twice. The one remaining school board uses a panel model, maintaining an IPRC structure for the elementary panel only. This is a relatively small public school board in the Northwestern region (population just over 1000) with more than likely few special education services at the secondary level, making the elementary panel IPRC in effect a central level committee.

The central level IPRCs can be found in public and separate school boards, in almost all areas of the province with population density figures ranging from the 10th to beyond the 90th percentile of our sample. Five out of seven of these boards have a pupil population between 1,000 and 10,000. The school level IPRCs can be found not just in public and separate school boards, but also in the secondary school board, district school area boards, Protestant separate school boards and hospitals and treatment centres. They have been reported from all areas of the province except for the Eastern region, most predominantly occurring in the Northeastern and Central regions. Nearly one-half (7 out of 15) of the respondents from the Northeastern region reported this model of IPRC organization.

All school boards reporting only school level IPRCs have populations below 50,000, most of them falling into the 1,000 - 10,000 range. This is the population group into which about half of our respondents fall. Nearly 80% of these boards have population densities below the 50th percentile for our sample. This high proportion of the one IPRC model which used school level committees only would indicate a preference on the part of smaller school boards with

relatively low populations and population densities to keep identification placement and review procedures and decision making as an in-school process.

Boards Using Two IPRC Types

A description of the 38 school boards that reported the use of two IPRC organizational models is illustrated in Table 6.

Table 6: Boards (38) using two types of IPRCs.

IPRC Types Used by Boards employing two IPRCs	Number of Boards
Central level and School level	19
Area level and School level	9
Central level and Area level	1
Central level and Exceptionality	1
Area level and Combination	2
School level and Elementary Panel	3
Elementary Panel and Secondary Panel	4

The 19 school boards using central and school level IPRCs are split between separate school boards (11), public school boards (7) and one Department of National Defence board, in all areas of the province, except for the Northwestern region. The pupil populations of these boards are distributed almost evenly in the 1,000 to 10,000 and 10,000 to 20,000 ranges, with a wide spectrum of population densities.

Seven of the nine school boards using area and school level IPRCs are mostly public school boards (7) while the remaining two are separate school boards. They are distributed in all geographic regions of the province, except for the Northwestern and Northeastern regions. These school boards have pupil populations that are generally higher than those boards using the central and school level tandem, with four boards found in the 20,000 to 50,000 range.

Similarly, the population density factors of these school boards are consistently greater than the 40th percentile for our sample.

The remaining school boards using 2 types of IPRCs are 8 public school boards and 3 separate school boards distributed across the province. These school boards, however, have lower pupil populations with population densities in the upper half of our sample. A closer examination of these boards reveals that a cluster of four school boards use an elementary panel IPRC and a secondary panel IPRC, which is clearly based on one model resulting in two types of different IPRCs. All four of these boards are relatively small (under 10,000) with population density factors in the lower half of our sample. Another three school boards use central and exceptionality IPRCs and area level and combination IPRCs. These three boards' second type of IPRC (exceptionality or combination) deal in one case with TMR pupils, in another with a small fraction of the exceptional population, that is autism, and in the third with pupils whose parents have applied for funding through the Ministry of Community and Social Services, Vocational Rehabilitation Branch. These three school boards have pupil populations between 40,000 and 60,000 with relatively high population densities. The remaining three school boards using school level IPRCs and elementary panel IPRCs are in the Midnorthern and Northwestern Regions of the province with relatively low population densities.

In short, there are no readily evident geographic or size factors which seem to be related to the choice of IPRC types in boards using two IPRCs.

Boards Using Three IPRC Types

Table 7 shows the organizational framework for those boards with three IPRC types. Within the 15 school boards in this category, seven employ a central level IPRC, an area level IPRC and school level IPRC, found across the province, except for the Midnorthern and Western regions. Most of these boards are public school boards (5) while the remaining two are separate school boards. The pupil population of these boards is in the mid range of our sample, ranging from 1,000 to 50,000 and population densities between the 40th and 80th percentile of our sample. The other eight school boards in this category, as listed in Table 7, can be viewed in a number of sub groups. The first sub group contains pattern numbers 2, 3, 4, and 6 (see

Table 7). For all of these school boards, a central (or area) level IPRC and school level IPRC deal with most exceptionalities, while the low frequency exceptionalities (trainable retarded, hearing impaired, physically handicapped, visually impaired, multiple handicapped, exceptional at the secondary level) are placed in the hands of a separate IPRC. The second grouping consists of two separate school boards showing patterns 5 and 8, where pupils are essentially prerouted to IPRCs according to their suspected exceptionality, except for French-speaking pupils in one board who go to a central IPRC. These two separate school boards are markedly different from each other. One is very small with a low population density, the other is very large with a large population density. The remaining pattern number 7, is in fact a grouping similar to the four other school boards operating with two IPRC types using an elementary IPRC and a secondary IPRC with the distinction of dividing the elementary panel into K-6 and Grades 7-8.

Table 7: Boards (15) using three types of IPRCs.

IPRC Types Used by Boards employing three IPRCs	Number of Boards
1. Central level, Area level and School level	7
2. Central level, School level and Combination	2
3. Central level, School level and Secondary Panel	1
4. Central level, School level and Exceptionality	1
5. Central level (French), Exceptionality and Exceptionality	1
6. Area level, (high) school level, Exceptionality	1
7. K - 6, 7-8 and Secondary level	1
8. Exceptionality, Exceptionality and Exceptionality	1

Boards Using More Than Three IPRC Types

There are four school boards in this category, three public and one separate from diverse parts of the province. All of these school boards have population densities greater than the 50th percentile of our sample with pupil populations that range from 1,000 to 50,000. Two out of the four boards are organized purely along the lines of separate IPRCs for specific exceptionalities with the number of IPRCs reading a maximum of eleven in one school board, while another has five IPRCs that nearly match the five exceptionality categories defined in the Revised Special Education Handbook (Appendix B). One more school board has a central level and school level IPRC along with two additional IPRCs for behaviourally disturbed and gifted pupils respectively. The last school board in this category has two types of school level IPRCs, elementary and secondary, two types of central level IPRCs, one for placement of difficult cases

within the board, another for admission to treatment centres, and a fifth IPRC for trainable retarded pupils.

Summary of the Numbers and Types of IPRCs Used By School Boards in Ontario

The numbers of IPRCs reported by the 91 school boards were related to the board's school population size, a population density factor, the location of the school board in the province and the type of board. Since the distribution of all of these variables is highly abnormal, with one or more extreme outliers, the relationships between the variables were tested with nonparametric measures, namely Spearman Correlation Coefficients and Kruskal-Wallis one-way analysis of variance, where reported chi-square values have been corrected for ties.

The results indicate that larger boards tend to utilize more types of IPRCs resulting in a greater number of IPRCs per board than those school boards with smaller school populations ($p < 0.001$). Similarly, there is a significant relationship between the deployment of a larger number of IPRCs and the population density factor ($p < 0.05$). This result is not surprising since there is a very strong correlation ($r = 0.7153$, $p < 0.001$) between the size of a school board's population and the population density factor. There is a definite lack of correlation between the number of IPRCs and the board's regional location.

There is also a lack of any significant pattern in terms of the number of IPRCs and the types of school boards. This relationship remained nonsignificant even when the IPRC number was related only to the two board types that account for 88% of our sample, namely, boards of education and county and district Roman Catholic school boards.

In order to assess the relationship of the types of IPRCs used by school boards to the boards' school population and population density factor, the 26 IPRC types were grouped once again according to the geographical, panel, and exceptionality models of IPRCs. IPRC types that fell in the category described by the combination model were included in the exceptionality model and were grouped according to the incidence rates of the exceptionality as indicated previously in Table 4.

Both population size and density are strongly correlated with the type of committees boards use in their IPRC process ($p < 0.001$). The use of the exceptionality model appears to be the most prevalent in large, densely populated boards, while the use of the panel model is more frequently found in smaller boards. The use of school level IPRCs is more frequent in smaller boards, while the area/family level committee is the most likely to be found in larger, more densely populated boards.

Factors Determining Referral to Level of Geographical Model IPRC

Respondents with IPRC organizations using the geographical model were requested to state the reason(s) for referring pupils to the specific level of geographical organization, namely to the central, family of schools or school level IPRC.

There were a total of 19 different factors identified by the respondents that were used in decisions to refer a pupil to one of the three geographical levels of IPRCs. Table 10 summarizes the 19 factors, showing their frequency of occurence as a function of the number of IPRCs per school board. The 19 different factors can be grouped into the following categories:

1. needs contained class in or out of school
2. needs in-school special education program
3. initial referrals
4. reviews only
5. procedural reasons
6. board has only one school
7. needs French-language schools

There were 137 (out of 184) IPRCs organized along one of the levels of the geographical model. Of these, 90 responded to the question regarding the factor determining the referral as shown in Table 8. There were 10 school boards that stated a second factor playing a role in the

referral decision. These factors for the most part reflected specific programs or levels of programs and are included in Table 8.

When the above seven groups of factors are considered as a function of the three levels of geographical organization, a pattern emerges. A summary of this pattern relating the factor for referral decision and the central family of schools and school level geographical types can be found in Table 8. Central level IPRCs tend to deal more with placement at a regional, out of school level, while the school level committees' focus appears to be the in-school special education program.

Table 8: Categories of reasons that determine the referral to the level of geographical model IPRCs.

Factor groups	Central level	Family level	School level
1. Contained Class needed in or out of school/region	29	6	4
2. In-school special education program		1	20
3. Initial referrals	3	3	3
4. Reviews only			8
5. Procedural Reasons	6	3	2
6. Board has only 1 school			5
7. For French-language schools	2		

Number of Meetings and Students Processed

For each kind of IPRC the boards reported, the questionnaire requested the number of meetings held and the number of students processed. A brief glance at the responses clearly suggests that there were different ways of interpreting these two items. There are a number of boards who apparently consider each pupil's case to be an IPRC meeting, while others consider one meeting to be the physical gathering of the IPRC members in one day during which time any number of students are discussed. Consequently, for a number of IPRCs, the number of

meetings is the same as the number of students processed, reading a maximum of 4589. Conversely, other boards' meeting numbers are a small fraction of the number of pupils processed. Table 9 shows the reported number of meetings and number of students processed during the 1983-84 school year in the eight IPRC types described earlier.

Table 9: Number of IPRC meetings and students processed during 83/84 in each IPRC model.

IPRC Model/Type	Numbers of IPRC meetings 83/84					Number of Pupils Processed 83/84				
	Mean	Med.	Min.	Max.	S.D.	Mean	Med.	Min.	Max.	S.D.
Central level	95	14	1	606	165	177	133	2	840	195
Family level	397	40	5	4589	1110	821	320	8	4589	1446
School level	267	74	0	2400	443	511	214	0	3488	817
Panel - Elementary	178	19	3	742	309	288	48	4	696	329
Panel - Secondary	38	15	3	131	53	158	121	23	464	180
Exceptionality low freq.	16	5	1	94	25	127	30	1	600	191
Exceptionality med. freq.	10	7	1	24	9	19	24	1	32	12
Exceptionality high freq.	55	5	1	228	95	183	176	1	600	170

Since the populations of the respondent boards vary a great deal, a more valid comparison of the number of meetings held and the number of students processed is obtained when these two variables are expressed as the number of meetings per 1000 pupils and the number of students processed per 1000 pupils of the boards' populations. Table 10 shows a summary of these calculations. The number of students processed at IPRCs shows a notable pattern across the province, however. It appears that school boards with smaller populations process more pupils per 1000 than boards with larger populations ($r = 0.2533$, $p < 0.001$) and school boards with lower population densities process more pupils than schools with larger values of P.D.F. ($r = -0.2543$, $p < 0.001$). Also, there does not appear to be a significant difference between the two major types of school boards (public and Roman Catholic) represented in our study in terms of the number of pupils processed per 1000 ($t = 0.22$, $p = 0.828$). There also does not appear to be a significant relationship between the number of pupils processed and any of the

six geographical regions of the province (Kruskal-Wallis, one-way anova, $x^2 = 6.6007$, $p = 0.2521$).

Table 10: Number of IPRC meetings and students processed during 1983/84 in each IPRC model per 1000 school population.

IPRC model type	Number of IPRC meetings per 1,000 pupils in 83/84					Number of Pupils Processed per 1,000 pupils in 83/84				
	Mean	Med.	Min.	Max.	S.D	Mean	Med.	Min.	Max.	S.D.
Central level	5.9	2.9	0.12	36.4	7.99	13.6	10.3	0.25	56.58	13.15
Family level	12.18	3.49	0.48	101.2	24.6	26.45	18.05	0.48	101.17	28.95
School level	41.3	15.23	0.0	302.9	53.2	64.21	49.66	0.0	302.9	58.97
Panel - Elementary	39.17	11.11	0.20	173.94	61.21	52.5	29.94	2.43	173.94	55.13
Panel - Secondary	7.48	5.83	1.12	19.8	7.2	30.85	34.56	6.98	48.35	17.35
Exceptionality low freq.	0.33	0.17	0.06	1.46	0.39	2.0	0.76	0.07	8.1	2.55
Exceptionality med. freq.	2.25	0.53	0.12	6.9	2.93	2.52	0.91	0.59	6.9	2.7
Exceptionality high freq.	8.79	0.61	0.10	32.57	13.29	14.00	10.35	2.03	29.7	10.9

Membership and Attendance (Question 3)

In order to determine the pattern of who attends IPRC meetings in Ontario, questions requested boards to identify the official membership of each IPRC structure they described as well as the regularity of the attendance pattern of individuals participating in the committees' meetings. In addition to the 22 titles provided on the questionnaire, 17 others were added to the list by the respondents. There were a number of questionnaires where the list of official members was dramatically different from the attendance list. It is possible that some boards interpreted the two questions in such a way that the indication of a person's membership appeared to require no further attendance data. Rather, these boards described in the second part of the question the attendance pattern of only those individuals who were not official members of the committee. In order to summarize this rather large data base, concerning individuals often with slightly differing, but perhaps comparable, job/function titles, a number of subgroups were used. These are outlined in Figure 1.

Figure 1: Membership and Attendance Subgroups

1. administration - superintendent, special education superintendent, separate school representative, director, vice-principal, principal, principals' association representative.
2. psychology staff - psychiatrist, chief psychologist, school psychologist, school psychometrician
3. other teachers - teacher, unspecified educator
4. special education staff - school resource teacher, chief special education consultant, school special education consultant, speech and language consultant, behavioural assistant, area resource teacher, case co-ordinator, speech and language teacher, special education teacher, special education co-ordinator, behaviour teacher
5. client - parent, student
6. referring school - referring teacher, referring principal
7. receiving school - receiving teacher, receiving principal
8. counselling staff - chief social worker, school social worker, guidance counsellor, attendance counsellor
9. medical personnel - outside agency representative, liaison worker

A summary of the memberships according to the above ten categories can be found in Table 11, indicating the number of times at least one member of the groups is an official member among the reported 184 IPRCs.

Table 11: Official members of ten membership groups in 184 IPRCs reported.

Membership group (at least one person is an official member)	Frequency of occurence
Administration	87%[1]
Psychology staff	30%
Other teacher	7%
Special education staff	84%
Client	11%
Referring school	63%
Receiving school	51%
Counselling staff	18%
Medical personnel	9%
Liaison worker	2%

[1]Note: 160 out of 184 IPRCs reported having at least one member of the administration as an official member of the committee. The remaining 24 IPRCs either did not report anyone as a member, or do not have an administrator as an official committee member.

The attendance pattern of individuals participating in the IPRCs can once again be displayed according to the ten subgroups. This information is shown in Table 12.

Table 12: Attendance pattern of 10 subgroups of attending IPRCs.

Attending Subgroups (at least one person in group is present)	Attendance Pattern demonstrated in 184 IPRCs				
	Always	Frequently	Sometimes	Seldom	Not reported
Administration	107[1]	13	24	35	32
Psychology staff	56	44	59	39	55
Other Teacher	10	2	3	2	67
Special education staff	144	70	79	43	13
Client	44	96	62	76	22
Referring school	123	65	36	13	14
Receiving school	70	49	52	41	27
Counselling staff	25	32	83	70	43
Medical personnel	15	17	48	82	54
Liaison worker	5	8	8	4	159

[1]Note: Out of 184 IPRCs, 107 reported having always in attendance at least one member of the administration.

There appear to be no strong patterns in the frequency of attendance and other board variables, such as the type of school board, the school board's location, or population size or density. As an example, Tables 13 and 14 show the attendance of parents with respect to type

of school board and boards' population densities. Parents are official members in 19 (out of 184) IPRCs. Thirteen of these IPRCs are in boards with population densities in the lower half of our sample.

Table 13: Parents' attendance pattern across 184 IPRCs according to board type.

Number of Boards Reported.	Type of Board	Attendance			
		Always	Frequently	Sometimes	Seldom
97	Public School Bd.	16%	61%	15%	7
54	County & Dist. R.C. S.S. Bd.	37%	56%	7%	-
1	Secondary School Bd.	-	-	100%	-
2	District School Area Bd.	50%	-	50%	-
3	Roman Catholic Area Bd.	66%	33%	-	-
1	Protestant Separate Bd.	-	100%	-	-
2	Department of National Defence	50%	50%	-	-
2	Treatment Centres	-	-	-	-
1	Hydro Bd.	-	-	-	-

Parents' attendance pattern also varied only slightly when compared across the different models of IPRCs, and the number of pupils processed at the meeting. For those boards, however, with a population density between the tenth and twentieth percentile, parents' attendance was significantly ($f = 0.74749$, $p < 0.01$) lower as the number of pupils processed increased ($f = 0.7479$, $p < 0.01$).

Table 14: Parents' attendance pattern across 184 IPRCs according to board population density.

Number of Boards Reported	Boards' P.D.F.	Attendance Pattern Always	Frequently	Sometimes	Seldom
10	0-10[1]	50%	20%	30%	-
12	10-20	33%	58%	83%	-
8	20-30	25%	75%	-	-
17	30-40	24%	71%	6%	-
20	40-50	10%	75%	10%	5%
13	50-60	31%	31%	31%	7%
16	60-70	31%	62%	6%	-
13	70-80	23%	69%	8%	-
18	80-90	22%	50%	11%	16%
24	90-100	12%	60%	21%	4%

[1] Note: 0-10 represents school boards with population densities below the 10th percentile of our sample.

Purchased Resources (Question 4)

Given the very large discrepancies that exist among the respondent school boards with respect to size, population size, location and tax base, it was anticipated that a number of services related to the IPRC process will not be available in all school boards. Question four requested data regarding the number and kind of services a school board purchased for its different IPRCs. Once again 184 IPRCs yielded information that is summarized in Table 15.

Table 15: Types of services purchased by school boards for 184 IPRCs.

Purchased service[1]	Frequency of occurence
superintendent	0.5%
psychiatrist	26.6%
chief psychologist	13.0%
school psychologist	16.3%
psychometrist	16.3%
school special education consultant	1.1%
chief social worker	8.2%
school social worker	3.8%
speech and language consultant	18.5%
medical personnel	31.5%
public health nurse	14.1%
guidance counsellor	0.5%
outside agency representative	3.3%

[1] Note: list includes only those services that were indicated as purchased by at least one IPRC.

When the information in Table 15 is viewed according to the ten categories defined for the previous question, it is clear that the medical profession (medical personnel, public health nurse and psychiatrist) is one of the most frequently purchased, non-board supported services required by Ontario's IPRCs. Psychological, psychometric and psychiatric services are in the greatest demand amongst those school boards who cannot or (do not) maintain these professionals on staff. Medical personnel's attendance is the highest at central level IPRCs and IPRCs dealing with low frequency exceptionalities (e.g. trainable retarded). Most other IPRCs

indicate the medical profession seldom attend IPRC meetings. The purchase of psychological services was made most frequently by boards using central and school level IPRCs.

Presentation Format (Question 4)

Table 16 presents a summary of the form of presentations made by those attending all the IPRCs in our sample. Further analysis can isolate an individual or group of individuals to determine a pattern of information presentation.

Special Provisions (Question 5)

This question aimed to tap the various ways in which school boards attempted to expedite the functioning of the IPRC process and ways in which special problems or concerns were overcome. There were 61 school boards (67% of our sample) who reported that they made no special provisions. Responses from those school boards reporting the implementation of provisions can be grouped into seven different ways of meeting local conditions. Table 17 illustrates the frequency with which the seven provisions were employed in school boards using the geographical models of IPRC organizations.

Table 16: Presentation format of personnel attending IPRCs.

	Form of Information		
Table:	Formal	Informal	Observer
Superintendent	27.2%[1]	38.0%	2.2%
Psychiatrist	29.3%	-	0.5%
Chief Psychologist	36.4%	2.7%	-
School Psychologist	45.7%	-	-
Psychometrist	60.3%	0.5%	-
Referring Teacher	73.9%	16.3%	-
Receiving Teacher	15.8%	39.1%	8.2%
Parent	26.1%	63.0%	1.1%
Student	12.5%	50.5%	6.5%
Referring Principal	65.2%	17.9%	3.8%
Receiving Principal	15.2%	41.8%	4.9%
School Resource Teacher	74.5%	9.8%	-
Chief Sp. Ed. Consultant	23.9%	16.8%	0.5%
School Sp. Ed. Consultant	47.3%	6.5%	0.5%
Chief Social Worker	16.8%	6.5%	-
School Social Worker	26.1%	5.4%	-
Speech & Lang. Consultant	68.5%	5.4%	-
Medical Personnel	43.5%	7.1%	-
Public Health Nurse	38.6%	27.2%	1.1%
Guidance Counsellor	36.4%	20.7%	1.1%
Attendance Counsellor	33.7%	23.4%	2.7%
RC Representative	11.4%	12.5%	1.6%
Outside Agency Representative	15.2%	1.1%	-

[1] Note: Out of 184, the superintendent presents information in a formal (written or verbal) report at 50 IPRCs (27.2%).

Table 17: Special provisions made by school boards using geographical model IPRCs.

Special Provisions	Frequency of occurence in: Central	Family	School
appoint facilitator to help parents	1	-	2
ad hoc meetings for crisis situations	2	2	1
telephone conference calls	9	2	11
flexibility in time and location	1	-	-
pre-IPRC meeting with parents and regular staff	1	2	3
translator or translated guide	-	-	2
adjust IPRC membership to meet needs	-	-	2
(Total)	(14	6	21)

Fifty-seven of the 91 school boards reported that they have the capability of providing IPRC services in French as well as English.

Decision Making (Question 6)

The questionnaire sought to seek a pattern in the way decisions are made at the IPRC. Table 18 summarizes the responses given by the 184 IPRCs to questions regarding procedure and personnel for the decision making process at committee meetings.

Table 18: Summary of voting and decision making processes in 184 IPRCs.

	Frequency of occurence
a) Who makes the final decision?	
i) formally designated members of the IPRC	83.7%
ii) all administrative, special education and resource personnel at the IPRC meeting	4.3%
iii) all those present at the IPRC meeting	9.8%
b) What is the procedure for making decisions?	
i) by formal vote	15.8%
ii) by consensus	81.5%
iii) majority of informal vote	1.1%

Additional Recommendations (Question 7)

In addition to the mandated decisions of designation and placement reached by the IPRC, a number of committees make recommendations that are passed on to the referring or receiving school personnel for further action or follow up. A summary of these recommendations and their frequency of occurence among the 91 respondent school boards are listed in Table 19.

Table 19: Summary of additional recommendations made by IPRCs in 91 school boards.

Recommendation	Frequency of occurence
1. Category/specific identification of exceptional pupils	77.0%
2. Content of the special program	37.4%
3. Development of program objectives	29.7%
4. Specification of special services	78.0%
5. When to review case	5.5%
6. Transportation	6.6%
7. Referral to outside agency	5.5%
8. Referral to other resource people	3.3%
9. Educational needs of students	7.7%

Some of the above nine recommendations clearly deal with procedural tasks (numbers 5 and 6) or housekeeping tasks (numbers 7, 8 and 9), others specify either the subcategory of exceptionality or placement in terms of additional services (numbers 1 and 4), while the remaining two (numbers 2 and 3) attempt to specify the content or program objectives for the pupil's program.

Boards making only one additional recommendation were concerned almost exclusively with either the category of the students' identification (9 out of 13) or the specification of the students' placement in terms of additional services (3 out of 13). One-half of the boards making only one additional recommendation use the school level IPRC model only. None of the school boards making only one additional recommendation focused on the content of the special education program. Boards making two additional recommendations were once again dominated by the students' exceptionality and placement designations. In 17 out of 24 instances the two recommendations were regarding the subcategory of identification and the specification of special services. In the remaining seven instances, a recommendation regarding the content of the special education program was combined with one of the identification/placement

recommendations. boards making three additional recommendations include (21 out of 23 times) the two recommendations focusing on the specification of special services and exceptionality categories. The third recommendation relates to either procedures or housekeeping tasks one-half of the time, while the other half includes a program specification as its third recommendation.

In short, very few boards reported using IPRCs to make suggestions or recommendations regarding program objectives or content. Rather, there appears to be a focus on specification of exceptionality categories and provision of services provided. Boards using only the central level IPRC model made additional recommendations 18 times. Of these 18 recommendations 13 concerned placement or exceptionality categories.

Time Commitments (Question 8)

On this item of the questionnaire, respondents filled out "ball-park estimates" of the number of person hours involved in the processing of a typical IPRC case. The process was divided into pre IPRC, IPRC, post IPRC and support services times. Seventeen of the 91 respondent boards had no information to answer this item, and the remaining 74 boards had only partially filled in the specific time requirements. Table 20 summarizes the results of this item. Further analysis of the pre IPRC data was sought to determine whether significant differences existed between boards' preparation for an IPRC. Specifically, calculations were made to determine ratio of time spent in case conference type activities versus assessment type activities within the pre IPRC time frame. Results of these calculations show that this ratio varies a great deal from a minimum of 0.036, meaning that the assessment time was 28 times that spent in case conferences, to a maximum of 4, meaning that the case conference time was 4 times that spent on assessment. There does not, however, appear to be a pattern with respect to these time ratios in the pre IPRC time commitments and the type of IPRC organizations used by the boards.

Table 20: IPRC time commitments reported in person hours per case.

IPRC Process		N	Time Commitment Minimum	Maximum	Mean	Median
Pre IPRC assessment		65	1.0[1]	60.0	6.50	4.8
	information gathering	65	0.5	20.0	2.42	2.0
	case conferences	63	0.5	12.0	2.44	2.0
	parents	6	0.5	5.0	2.08	1.5
	agenda	1	1.0	1.0	1.00	1.0
	unspecified	8	0.5	24.0	4.44	2.0
	Total pre IPRC	69	1.5	85.0	11.62	8.0
IPRC	average length of meeting	70	0.2	5.0	0.73	0.5
	number of persons attending	70	3.0	9.0	5.20	5.0
	number of person hours	70	1.2	24.0	3.84	2.5
Post IPRC program planning		62	0.3	19.0	2.59	2.0
	parents	6	1.0	6.0	2.33	2.0
	receiving school	6	0.5	6.0	2.17	2.0
	special education services	4	2.0	6.0	3.00	2.0
	undesignated	5	1.7	6.0	2.70	2.0
	total post IPRC	66	0.3	27.0	3.23	2.0
Support secretarial/records		62	0.3	99.0	3.50	1.0
	services travel time	47	0.2	6.0	1.34	1.0
	meeting with other agencies	49	0.1	7.5	1.62	1.0
	meeting with ministries	26	0.1	2.0	0.85	0.5
	administration	2	1.0	2.0	1.50	1.5
	meeting with other boards	1	0.5	0.5	0.50	0.5
	undesignated	6	0.3	1.3	0.93	1.0
	Total support services	65	0.5	108.0	6.01	3.5
Total Time:		66	5.0	139.0	24.43	17.7

[1] NOTE: figures for time are given in hours

Number of Pupils Presented at IPRCs (Question 9)

This item is similar to the question asked on the second page of the questionnaire where the total number of pupils processed at each type of IPRC is requested. Because of the very large discrepancies in terms of the boards' populations, a number of exceptionality categories were tabulated according to the number of pupils processed in each exceptionality category per 1000 pupils in the boards' populations. The summary of these calculations can be found in Table 21. The information in Table 21 gives a good indication of the incidence rates of the various exceptionalities across the province. Although this information is based only on the number of pupils processed during one school year, there is a strong correlation ($r = 0.65$, $p <$

0.001) between the data gathered during the 83/84 school year and that obtained from the boards' report filed with the Ontario Ministry of Education for September, 1984.

Table 21: Number of pupils presented at IPRCs per 1000 pupils by categories of exceptionality in 1983-84.

Category of Exceptionality	Number of pupils presented/1000 pupils					
	N	Minimum	Maximum	Mean	Median	S.D.
Behavioural	37	0.3	27.9	6.6	3.1	7.6
Autism	24	0.02	2.0	0.34	0.2	0.44
Hearing Impaired	40	0.06	4.4	0.94	0.6	0.95
Speech & Language Disabled	33	0.09	87.0	10.4	3.4	16.6
Learning Disabled	54	0.89	87.7	24.6	16.3	21.3
Gifted	40	0.12	53.1	9.9	5.5	10.7
Educable Mentally Retarded	55	0.15	36.6	10.1	6.8	8.4
Trainable Mentally Retarded	36	0.08	14.3	3.6	3.1	3.4
Orthopaedic	44	0.07	3.3	0.84	0.61	0.75
Visual	33	0.04	1.5	0.4	0.34	0.24
Multiple	40	0.05	16	1.6	0.8	2.7
Total Exceptional	27	0.21	174.3	50	31.6	45

The 'total exceptional' row in Table 21 indicates that the average number of pupils presented at IPRCs during the 83-84 school year was 50/1000 pupils of the boards' population, or 5 per cent. It would also appear from these data that potential exceptional pupils (given that not all pupils presented to the IPRC will be deemed exceptional) do not come in equal numbers from different parts of the province. School boards with lower population densities processed significantly more pupils per 1000 than boards with higher population densitities ($r = 0.404$, $p < 0.01$). In spite of the fact that there is a strong positive relationship ($r = 0.5315$, $p < 0.001$) between the boards' populations and their population density factors, the correlation between boards' populations and the number of pupils processed in 83/84 is not significant.

Review Procedures (Question 10)

This questionnaire item aimed to collect data regarding the frequency of review for exceptional pupils in each board. In addition, information was requested about the number of pupils who were changed from exceptional to non-exceptional designations primarily resulting from the review process. The respondent boards indicated that 78% reviewed exceptional pupils once annually, 14.3% biannually, 2.2% quarterly and 1.1% of the 91 school boards reviewed exceptional pupils more frequently than four times each year. Of the 91 school boards, 82.4% stated that they had provisions for changing a pupil's identification from exceptional to non-exceptional. Table 22 summarizes the number of pupils for whom these provisions were put into effect.

Table 22: Number of pupils changed from exceptional to non-exceptional.

School year	Number of pupils changed from exceptional to non-exceptional				
	N	Mean	Median	Minimum	Maximum
1982-83	19	29	7	1	370
1983-84	35	26	8	1	372
			Number of pupils changed per 1000 pupil population		
1983-84	35	4.1	1.7	0.14	21.1

The last few items on the questionnaire attempted to ascertain the extent to which parents are involved or are in a sense encouraged to become involved in the IPRC process. The boards' distribution of the parents' guide and, as mandated by Ontario Reg. 554/81, the manner in which it is made available to the parents, are indices of the extent of parental involvement which will impact on their ability and effort to participate in the identification, placement and review process. Eighty-nine of the ninety-one boards reported the availability of a parents' guide. Boards were then asked to state the process used to make parents aware of the

availability of this guide. This item was in the form of a checklist with a number of options and boards were encouraged to check off as many of the items as applied to them. Table 23 summarizes the boards' responses to this particular item. Since the boards checked more than one of the suggested processes, it is important to look at the different combinations of processes indicated in order to determine whether boards' policies help or hinder the involvement of parents in the IPRC process. Assuming that parental access to the school system is generally uniform across the province and that school boards' efforts are often centered around ensuring that parents are kept informed of various board and school policies and events, the distribution of the parents' guide is but one of numerous occurrences in any given school year when parents and school boards interact. Since parental involvement with the school board is most often at the school level, it can be stated that the availability of information at the school level is more accessible to parents than the availability of information at the board level. Similarly, if information is sent directly to the parents, its accessibility is improved even further. Consequently, procedures used by boards to make parents aware of the parents' guide are grouped in a sequential manner described below and presented in Table 23.

Table 23: Dominant procedures used by school boards informing parents of the availability of parents' guide.

Model(s) of IPRCs used by boards	N	Dominant Procedures used by boards with guide: Guide Sent to all parents	Guide available at school	Guide available at board office	Guide available after process began
Central level only	7	1	4	.	2
School level only	23	10	12	.	1
Central & School level	18	4	6	.	8
Area & School level	9	1	8	.	.
Central, Area & School level	7	4	3	.	.
Total (including other models as well)	87	28	45	1	13

Information presented in Table 23 clearly suggests that the most preferred method of distributing parents' guides is at the school level. Only one school board has the guides available at the board office (a medium size public school board) as its dominant means of distribution, while boards informing parents about the guide after the assessment or IPRC process has begun, make the guide available to the parents at the time of notification of the IPRC meeting.

Parents' initial involvement with school boards about the IPRC process will more than likely play a significant role in the outcome of the entire procedure as well as the satisfaction of parents in terms of knowing that their participation and involvement is valued and is important. On this item, respondents were asked to rank order nine possible ways in which parents initially become involved with the IPRC process. Table 24 summarizes the results of this item in terms of the number of times each possible way was selected and the frequency with which it received a rank order from one to nine. Once again, the eleven (there were two additional suggestions) ways of initial involvement can be grouped according to the consideration and attention given to the parents' opportunity to participate in the IPRC process. These groups are as follows:

1. **Parents involved before the process begins (comment numbers 1, 3, 10 and 11)**

2. **Parents involved following the initiation of the IPRC process (comment numbers 2, 4, 5, 6 and 8)**

3. **Parents involvement does not clearly reflect school's previous position (comment numbers 7 and 9)**

Table 24: Initial involvement of parents with the IPRC.

Ways of involvement	Frequency of rank order									
	n	1	2	3	4	5	6	7	8	9
1. through teacher interview before referral	60	80%[1]	10%	7%			2%	2%		
2. through teacher interview after referral	17	18%	41%	18%	18%		6%			
3. through principal interview before referral	52	42%	44%	12%				1%		
4. through principal interview after referral	20	15%	50%	15%	5%	10%		5%		
5. through notice of IPRC meeting	36	6%	58%	25%	6%		3%	3%		
6. through notice of IPRC outcome	18	6%	6%	56%	22%		6%		6%	
7. through parent initiation	22		23%	59%		9%	5%			5%
8. through parent participation at meeting	38	5%	18%	66%	5%	3%		3%		
9. through outside agencies	11		9%	27%	18%				36%	9%
10. through guidance department	1		100%							
11. through psychology department	2			100%						

[1] Note: Out of the 60 instances when "through teacher interview before referral" was selected, it was ranked as number one 80% of the time.

Information shown in Table 24 clearly indicates that school boards, on the average, assign higher priority (a lower number) to involving parents in the IPRC process before referral to the IPRC.

Parents can be notified of the outcome of the IPRC meeting in a number of ways. Table 25 summarizes the respondents' typical choices for informing parents of the decisions made by the IPRC. Once again, a number of boards checked off more than one response indicating a variety or combination of ways in which parents are notified within one board.

Table 25: Ways in which parents are informed of IPRC decisions.

Ways of informing	Frequency of occurence
Parents are present at the IPRC	78%
Parents are involved in post IPRC interview with principal	44%
Parents receive a letter summarizing IPRCs findings	89%
Parents are telephoned after the meeting	3.3%

Relationship of Variables

Number of pupils processed at IPRCs per 1000 school population

Results of the questionnaire indicated that there was great variation in this variable. The number of pupils processed in all 184 IPRCs of the 91 school boards during the 1983/84 school year per 1000 pupil population, indicated a minimum of 0.21 (0.02%), a maximum of 302.9 (30.3%), with a mean value of 69.96 (7%), and a standard deviation of 59. The median value of 56.765 (5.7%) divided the 91 boards into two groups: indicating a relatively low and high ratio of pupils processed at IPRCs. This variable appears to be related to three of the variables: population size, IPRC organization, and the attendance pattern of clients and receiving school personnel. School boards with smaller school populations processed a significantly larger fraction of their school population at IPRCs than boards with larger populations during the 1983/84 school year ($r = -0.193$, $p < 0.05$). A t-test comparing the means of the population sizes of the two groups of school boards split according to the low/high ratio of pupils processed at IPRCs, however, did not demonstrate a significant difference in the number of pupils processed. When similar comparisons are made between boards' populations and their cumulative number of exceptional pupils obtained from the September '84 report, figures indicate that the number of exceptional pupils as a proportion of the school population is not significantly different between smaller and larger population boards. Figures for the 1983/84 school year indicate that a significantly smaller percentage of the school boards' population was

processed by IPRCs in this school year than the percentage of total exceptional pupils within school boards.

The IPRC organizations of school boards in the low/high ratio of pupils processed at IPRCs differed significantly in terms of the number of boards that used only one type of IPRC model. Table 26 summarizes the number of school boards using central level only and school level only IPRCs, and their relationships to the number of pupils processed.

Table 26: Relationship between school boards using only central or school level IPRCs and the number of pupils processed.

Number of School Boards	Number of pupil s processed at IPRCs per 1000 school population	
	Low ratio of pupils processed	High ratio of pupils processed
Central level only	5	0
School level only	7	11

Other IPRC organizations appeared to be split relatively evenly between the two groups of school boards. School boards processing a higher ratio of their school population clearly favoured the use of school level only IPRCs if only one type of IPRC was employed.

The number of pupils processed is significantly related to the types of IPRCs employed by the boards. Table 27 summarizes this relationship based on a Kruskal-Wallis one-way analysis of variance, with the reported chi-square value corrected for ties. Interpretation of the results in Table 27 indicate that the largest proportion of pupils are processed at school level IPRCs, and that a relatively high portion of the pupils were processed by IPRCs of the panel model. The results also confirm that the placement of IPRCs of the exceptionality model and

combination model into three groups based on incidence rates was consistent with the proportional number of pupils processed.

The number of pupils processed by IPRCs also appeared to be significantly related to the attendance pattern of clients ($r = -0.2085$, $p < 0.05$) and receiving personnel ($r = -0.3119$, $p < 0.005$). These results would indicate that fewer pupils are processed when parents, pupils, and receiving school personnel attend the committees' meetings.

Table 27: The relationship of IPRC types to the number of pupils processed at IPRCs per 1000 school population.

Type of IPRC	Number of Pupils processed per 1000 pupil population	
	Mean Rank	Cases
Geography Model		
Central level	58.01	35[1]
Area/family level	73.94	17
School level	105.62	54
Panel Model		
Elementary panel	97.44	9
Secondary panel	90.40	5
Exceptionality Model		
Low incidence rate	18.50	15
Medium incidence rate	24.10	5
High incidence rate	60.70	10
	$\chi^2 = 68.5104$	$P < 0.001$

[1]Note: 150 put of 184 IPRCs responded to this item of the questionnaire.

Time spent prior to the IPRC meeting on a case as a percentage of the total number of person hours for an IPRC case

Results of the questionnaire indicated great variation in the amount of time spent prior to the IPRC. The percentage of time spent by school boards in the pre IPRC component of the IPRC process indicated a minimum of 8%, a maximum of 78%, with a mean of 50%, and a

standard deviation of 15.32. The median value of 47% divided the 91 school boards into two groups one with a relatively low and one with a relatively high percentage of time spent in the pre IPRC stage of the total IPRC process per case. The results indicate that boards in the higher percentage group also spent more of their time in the pre IPRC stage than in the IPRC meeting itself ($r = 0.7568$, $p < 0.001$). It would appear, however, that boards spending more of their IPRC time in the pre IPRC stage spend a greater portion of this time in formal assessment rather than in case conferences ($r = -0.3182$, $p < 0.05$). There also appears to be a significant indication that school boards spending a higher portion of their IPRC time in the pre IPRC stage tend not to involve the parents in the process prior to the initial referral to the IPRC ($r = -0.2991$, $p < 0.05$).

The IPRC organizations of school boards in the low/high percentage of pre IPRC time differed significantly in terms of the numbers of boards that used only one type of IPRC organization. Table 28 summarizes the number of school boards using central level only and school level only IPRCs and their relationship to the percentage of total IPRC time spent in the pre IPRC stage. Other IPRC organizations appeared to be relatively evenly split between the two groups of school boards. School boards which spend relatively less time in the pre IPRC stage of the IPRC process clearly favour the use of the school level IPRCs when only one type of IPRC was employed.

Table 28: Relationship between school boards using only central or school level IPRCs and the percentage of the total IPRC time spent in the pre IPRC stage.

Number of school boards	Pre IPRC time as a percentage of total IPRC time	
	Low Pre IPRC percentage	High Pre IPRC percentage
Central level only	2	3
School level only	11	6

Discussion

Organization

Conclusions based on this (representative) sample of Ontario's 186 school boards would certainly support the notion that there is a great deal of variation in terms of the IPRC organizations and procedures across the province. With an average number of two IPRCs and a total number of 26 different types of IPRC organizations, it is important to try to reduce the number of types to a manageable size. The prototypes introduced in the questionnaire, namely organizations by geography, exceptionality, panel or combination, seemed to be appropriate, since responses were obtained in all four of them.

Seventy-five per cent of the IPRCs were organized along pre-existing geographical lines, namely school, area and central board levels, while 52% were school level meetings. School boards reporting the use of the combination model can be quite readily included in the exceptionality model since their focus was on a number of different exceptionalities for a geographical division other than the central board level. IPRCs following the exceptionality model make up 17% of the total respondents. The highest portion of these IPRCs deal with relatively low incidence rate exceptionalities. IPRC organization according to the panel model make up the remaining 16%. It is noteworthy that there are so many IRPCs in the

exceptionality model in spite of the Ministry of Education's interpretation stating that this IPRC organization based on exceptionality may introduce an unwanted bias in the decision-making process. Most school boards have one or two IPRCs. When there is a choice of which level of IPRC a pupil is referred to within the geographical model, school level committees focus more on in-school placements and program, while central level meetings tend to deal more with regional placement and program. A number of school level IPRCs appear to be set up for reviews only while the number of IPRCs that appear to deal specifically with new referrals are evenly split between the three geographical levels. It would appear that exceptionality model IPRCs are most frequent with larger more densely populated boards.

School boards with lower populations and lower P.D.F. tend to favour school level IPRCs, either as the sole committee structure or together with another model. School level IPRCs appear to have been responsible for a higher proportion of pupils processed during the 1983/84 school year. Boards opting for school level only IPRCs, therefore, tend to be smaller than boards using central or area level IPRCs.

IPRC Procedures

Proportion of Students Processed

School boards with larger populations in lower population density areas (large rural boards) tended to process a greater percentage of their student population at IPRCs during the 83/84 school year than boards with larger populations in more densely populated areas (large urban boards). This may reflect the considerably limited options available to parents and school board officials in rural and smaller urban centres during this school year. Alternatively, smaller boards may have been comparatively slower in implementing IPRC procedures and may only in the 1983/84 school year have been dealing with the bulk of referrals. Overall, the percentage of the school population processed at IPRCs during the 83/84 school year was significantly lower than the percentage of total exceptional pupils according to the respondent boards' September '84 report. This could be the result of some respondents' focus on the inclusion of new referrals only, rather than all pupils reviewed at IPRCs. Alternatively, it is possible that

this particular school year saw a proportional drop in the number of pupils processed at IPRCs compared to earlier years.

School boards with school level only IPRCs tended to spend a smaller percentage of their total IPRC time in the pre IPRC stage, perhaps suggesting that school level IPRCs, which are more likely in lower P.D.F. boards, process a relatively larger number of pupils in a manner consistent with the restorative model.

Attendance at IPRCs

The average number of people attending an IPRC is five. In 71% of the cases a superintendent is always in attendance. Since the attendance of a supervisory officer is required by the legislature, presumably the remaining 29% of the time the role of the mandated supervisory officer is filled by a designate. According to the questionnaire responses, however, this designate is clearly not always a member of the administration grouping outlined previously. The second most frequent member and attender of the committee is a representative of the special education staff, followed by a representative of the referring school. Parents' official memberships are most frequent in school boards with relatively low P.D.F., but their attendance is lower in these boards. It would appear that in relatively sparsely populated boards where parents are official members of the committee, they do not or cannot take advantage of the right to attend meetings.

Services Purchased

The most frequently purchased services are medical, psychiatric and psychological. The format of presentations would indicate that purchased services most frequently contribute to a formal presentation at the IPRC. Assuming that the weight of the presentation is increased with its formality, psychology staff, special education staff and the referring school's statements would be of greatest influence at the committee meetings.

Most special (additional) provisions to meet parents' and pupils' needs are made by the school level IPRCs. This may indicate an increased demand at this level matched by increased awareness, flexibility, or lack of consistency. Decision making at IPRCs appears to be one of

the most consistent items measured in this questionnaire, showing that the overwhelming majority of committees attempting to reach a consensus amongst the formally designated members of the IPRC on issues of designation, placement, and services.

Additional Recommendations

The number of additional recommendations strongly suggests that IPRC meetings are concerned with more than their legal mandate in terms of their decision making. The number of recommendations dealing with identification and placement (rather than program content) indicates that school boards are adhering to the ministry's recommendation of ensuring that exceptional pupils are identified with either one of five groups or one of 13 categories outlined in the Revised Special Education Handbook (O.M.E., 1985). The high frequency of these recommendations, combined with the relatively lower frequency of recommendations aimed at program content, may indeed indicate that the majority of Ontario's IPRCs are structured in a manner consistent with the restorative (traditional) model. The lack of consistency between any one type of IPRC structure and the prevalence of one of identification or program content recommendations may underline the fact that the particular manner in which IPRCs function is a result of individual committees' decision making and initiative rather than dependence on a single central board policy.

IPRC Time Commitments

The questionnaire item requesting the number of person hours spent on a typical IPRC case was one of the least well answered ones. It is feasible that some of the large discrepancies obtained with this item are due to the 'ball-park' nature of the estimates. There is considerable consistency of the responses within the IPRC times, since this is the most measurable of all the time segments surveyed. These data indicate that the average amount of time spent on an IPRC case is 30 minutes. The use of these time values as a descriptor variable was important in that it pointed to the earlier discussed difference between school level only and central level only IPRCs.

Referral Rates

The number of pupils presented at IPRCs during the 1983/84 school year yielded an annual referral rate which appeared to be lower than the incidence rates for various exceptionalities according to the cumulated number of exceptional pupils reported in Ontario's school boards' September '84 reports. The questionnaire items requesting numbers of pupils processed, was not fully answered by a large number of respondents, and there may have been some confusion in the reader's mind in terms of the difference between this item and a previous one requesting the number of pupils processed at each type of IPRC. The two items did, however, indicate that s[illegible]ller boards and boards with lower P.D.F. values presented and identified more pupils in 1983/84 than other boards.

When consideration was given to another factor thought to be indicative of boards' service delivery model, the ratio of total exceptional pupils to the number of remedial language pupils at the elementary level, it was discovered that an increase in the identification of exceptional pupils meant a relative decrease in the number of remedial pupils. This increase in exceptional pupils also was paralleled by an increase in the ratio of pupils placed into withdrawal programs rather than contained classes. School boards with a relatively lower ratio of exceptional to remedial pupils, on the other hand, showed a higher fraction of their exceptional pupils enrolled in contained classes. These observations may indicate that the prevailing method of meeting the needs of those pupils who cannot be assisted by a remedial program is to declare them exceptional and place them into contained programs. Pupils placed into contained programs appear to have a higher priority of placement and identification than withdrawal programs/pupils.

There were few significant correlations between the incidence rates of various exceptionalities, and thus there appears to be no evidence that the identification of one type of exceptionality may significantly favour or depress the identification of another.

Most respondent school boards indicated that the progress of exceptional pupils was reviewed once a year, and they also indicated that they had in place provisions for the removal of the exceptionality identification for a pupil, that is, a demission process. The relatively low

response rate limited analysis with this item. The large variations found in the range of the variable requesting the number of pupils processed at IPRCs may in part be due to the respondents' interpretation regarding the inclusion of reviews rather than new referrals only.

Parental Involvement

Amendments to the Education Act resulting from Bill 82 and its associated regulations are designed to ensure parental awareness and participation in the IPRC process. The province-wide availability of the mandated parents' guide and its most frequent school level distribution prior to the pupil's referral, indicates that in most jurisdictions steps are taken to make parents aware of their rights. The timing of parental involvement at the initial stages of the IPRC can be considered a good barometer of a board's approach to inform parents of their rights. Once again most school boards appear to gain the parents' entry into the process in a manner that is consistent with the letter, as well as the spirit, of the law. There is, however, some data that clearly indicate some boards' lack of concern for passing important information on to parents regarding their children's progress through the curriculum and subsequently through the identification, placement and review process. For example, only 87% of the respondent school boards inform parents of their right to appeal the decision(s) of the IPRC. Thirteen per cent do not do so.

Parents' and pupils' attendance at IPRC meetings is most frequent at IPRC meetings dealing with low incidence rate exceptionalities. Parents' attendance is significantly higher in school boards with a relatively lower P.D.F. and with boards that have a low ratio of exceptional to remedial pupils. These results do not conclusively indicate, however, that it is the parents' presence which leads to a reduction in the number of identifications of exceptionality, since school boards with lower P.D.F. values also tend to have higher ratios of exceptional to remedial pupils.

References

Directory of Education 1984/85 (1985). Toronto, Ontario: Ontario Ministry of Education.

Maki, L. E. (1984). *Bill 82 Bulletin* (No. 1984:13). Toronto, Ontario: Ontario Ministry of Education.

Ontario. Ministry of Education (1982, December 14). Special Education Questions and Answers (Summary). *Regional Symposium for the Central Ontario Region.*

Special Education Handbook - Revised (1984). Toronto, Ontario: Ontario Ministry of Education.

Wilson, Keeton Anne (1980, October). Are All Those IPRC's Really Necessary? *Exceptional Children. Ontario Provincial Newsletter*, 20(1).

Wilson, Keeton Anne (1983). *Opening the Door - A Key to the Legislation.* Ontario's Public School Teachers' Federation.

Wilson, Keeton Anne (1984). *Opening the Door - A Key to Resource Models.* Ontario's Public School Teachers' Federation.

APPENDIX C

C1 **Principal Interview - English**

C2 **Teacher Interview - English**

C3 **Principal Interview - French**

C4 **Teacher Interview - French**

APPENDIX C1

OISE Bill 82 Implementation Study

Dept. of Special Education. Contact 923-6641 ex.2457

1. PRINCIPAL INTERVIEW

YEAR 4. ROUND 1

Demographics

Date _____

Principal's name _____

School name _____

School composition Grade levels _____

No. of pupils _____ No. of teachers _____

segregated special education classes, _____ No. of special education teachers _____

resource unit? _____ No. of resource teachers _____

_____

French immersion _____

Teaching History

Years? Level? Subjects? _____

_____

Special Ed. Experience _____

History as a principal

Years? Level? _____

Teaching now? _____

Educational History

Highest educational level attained? _____

Special ed. qualifications? _____

PRINCIPAL INTERVIEW

YEAR 4

I. IDENTIFICATION

A. Pre-referral activities

1. In your school what initial steps is a teacher expected to take when (s)he becomes concerned about a child's academic progress or behaviour? (PROBES: observation, informal assessment, describe any in-class modifications.)

_____

_____

_____

_____

2. How long might these pre-referral activities (assessment and monitoring procedures) take? _____

_____

_____

3. At what point in the pre-referral process are parents involved? Who has the responsibility to contact the parents? How are the parents involved?

_____

_____

_____

_____

4. What in-school resources (personnel) are available to the regular class teacher? How does the teacher arrange for these resources to become involved? What assistance would a teacher expect from them? (i.e., consultation, talk to the child, observe the class, etc.) DEAL WITH ASSESSMENTS IN THE NEXT QUESTION.

_____

_____

_____

_____

_____

_____

II. ASSESSMENT

1. Is any assessment done to help people in the school meet the needs of a child before you consider referring him/her to an IPRC? What are the components of that assessment? Who conducts that assessment?

2. What use is made of the results of that assessment? i.e., Is there any in-class modification for the child following the assessment? If yes, how is that modification decided on?

3. At this point, are the parents involved? Who has the responsibility for involving them? Describe the parents' involvement.

4. On what basis is the decision made to refer a pupil to an IPRC?

5. What additional assessments are usually done when preparing to present the child to the IPRC? Who conducts them? (PROBE for psychological and educational assessments, including standardized assessments, observations, withdrawal teaching, etc.)

6. Describe how parental permission is obtained for those assessments? (i.e., psychological)

_____

_____

7. What is the usual time interval

   a. between the referral for psychological assessment to the actual assessment taking place?

   _____

   _____

   b. from the time of the actual assessment to when feedback is given to the school?

   _____

   _____

   c. What is the usual time interval from the time of the actual assessment until feedback is given to parents?

   _____

   _____

8.

   a. Who has responsibility for reporting the assessment findings to the teacher? How is this done?

   _____

   _____

   b. Who has the responsibility for reporting the assessment findings to the parents? How is this done?

   _____

   _____

III. PROGRAM PLANNING AND OBJECTIVES

A. Program monitoring

1. Who monitors the implementation of the special education program after a child is placed in one of your special education classes by an IPRC?

_____

2. How frequently are these programs monitored?

_____

3. What criteria are used in the monitoring?

_____

4. After this type of review (not IPRC review), how are program modifications achieved if required?

_____

_____

_____

5. Are parents consulted or involved at this stage? If yes, describe their involvement.

_____

_____

6. What are your feelings about integrating an exceptional child into the regular classroom? (i.e., when and how should it be done?)

_____

_____

_____

_____

7. Who has responsibility for programming for that child in the regular class?

_____

8. Who is responsible for monitoring the child's progress in the regular class?

_____

IV. REVIEWING STUDENT PLACEMENT AND PROGRESS

1. **After the placement of a child in your school, how frequently are IPRC review meetings held?**

2. Who initiates the IPRC review?

3. What is your role and responsibility at the IPRC review?

4. Who else is involved in the IPRC review and what is their role and responsibility?

5. Has the child's placement ever been changed as a result of the review? How was it done?

6. Has the child's program (i.e., program plan and services, learning goals, resources, etc.) ever been changed as a result of the review? How was it done? (i.e., Who had the responsibility for implementing it?)

7. Typically, how much time is spent on an IPRC review for a child?

8. How are the parents involved? (Describe their involvement i.e., participation, permission for program/placement changes, etc.)

_____

_____

_____

V. OTHER COMMUNICATION WITH PARENTS

1. Is the Parent Guide now available? Has it been disseminated? How do parents get their copy of it?

_____

_____

_____

2. Since September, 1985, have you done anything to let parents know about their role and rights regarding Bill 82?

_____

_____

_____

VI. EVALUATION OF DELIVERY MODEL

1. What are you doing specifically to evaluate the success of your special education delivery model? Describe.

_____

_____

_____

_____

2. Do you have any specific objectives that you would like to achieve in your school regarding special education?

_____

_____

_____

3. How would you describe your dominant role in implementing special education programs in your school? Would you

   a. translate board policy into a set of procedures to be followed and delegate tasks to be done? (manager)

   b. deal more directly with program development and support the staff in making decisions about children? (facilitator)

   c. deal with problems directly and have a 'hands on' involvement with each exceptional child? (do'er)

VII. PROFESSIONAL DEVELOPMENT

Since June, 1985, what have you done to learn more about special education? i.e., types of exceptionalities, Bill 82, Board policies, available programs & curriculum, etc. (PROBE: personal reading, workshops, university courses, conferences, etc.)

_____

_____

_____

_____

APPENDIX C2

OISE Bill 82 Implementation Study

Dept. of Special Education. Contact 923-6641 ex.2437

2. TEACHER INTERVIEW

YEAR 4. ROUND 1

Demographics

Date _____

Interviewee's name _____

School name _____

School composition

(ie.,grade levels _____

segregated special education classes, _____

french immersion,) _____

_____

Interviewee's Position _____

Current Class _____

Teaching History
Years, Division _____
Subjects _____

_____

Certification in Special Ed.
AQ (Additional Qualifications) Part 1 _____ Part 2 _____ Part 3 _____

PART ONE

I. IDENTIFICATION/REFERRAL/ASSESSMENT

A. REGULAR TEACHERS

1. When a child comes to your class and it seems that (s)he's going to need special education:

(i) What is your role in identifying that child? (i.e. What do you do to determine that he has those special needs?)

(ii) What (other) assessments, record keeping, observation, etc. do you do prior to referring that child?

(iii) How long would you carry on those in-class activities before referring?

(iv) Who would you informally/formally refer the child to? What do you expect they will do?

B. SPECIAL EDUCATION TEACHER AND RESOURCE TEACHER

1. What is your role when a teacher/principal tells you of a child in a regular class who is having problems and may need special help? (PROBES: observation, assessment, program planning with the regular teacher, withdrawal...)

II. PROGRAM

A. SPECIAL EDUCATION TEACHERS

I want to discuss your role in programming in these next questions. I want to know what are your responsibilities and operating guidelines in programming for pupils.

PROGRAM QUESTIONS

a) Are objectives set for the pupil?

b) Who sets them?

c) Do you record them?

d) How often do you review them?

e) Do you ever change them? If yes, for what reasons?

f) How do you judge the success of your program for an individual pupil?

1. How are you involved in programming for the pupil in your segregated class? (If they are involved, ask the 'program questions').

2. How are you involved in programming for the pupil in your integrated class? (If they are involved, ask the 'program questions').

B. REGULAR TEACHERS & RESOURCE TEACHERS

I want to discuss your role in programming in these next questions. I want to know what are your responsibilities and operating guidelines in programming for pupils before and after special education referral and placement.

PROGRAM QUESTIONS

a) Are objectives set for the pupil?

b) Who sets them?

c) Do you record them?

d) How often do you review them?

e) Do you ever change them? If yes, for what reasons?

f) How do you judge the success of your program for an individual pupil?

1. PRE-IPRC

(i) For a child who is a concern (either academic or behavioural/social concern) to you, are you involved in programming for that child prior to the child being IPRC'd? (If they are involved, ask the 'program questions').

_____

_____

_____

_____

_____

2. POST-IPRC

(i) Are you involved in programming for the partially integrated pupil? (If they are involved, ask the 'program questions').

in the integrated setting _____

_____

_____

_____

in the segregated setting _____

_____

_____

IV. DELIVERY MODEL

1. **How do you work with the (select the appropriate 3 of the following) regular teacher, resource teacher, special education class teacher and principal in monitoring and evaluating these pupils' overall progress?** (PROBES: joint objective setting, frequent discussions re how the resource program and the regular programs 'fit' together, discussions re the pupils' progress, sharing ideas, problem solving, etc.)

(i) regular teachers _____

_____

_____

_____

_____

_____

(ii) resource teacher _____

_____

_____

_____

_____

(iii) special education teacher _____

_____

_____

_____

_____

(iv) principal _____

_____

_____

_____

_____

IV. REVIEW

1. What is your role in keeping track of a pupil's progress for IPRC review purposes? (e.g., record keeping, assessments, anecdotal notes, program evaluation, etc.)

2. How often is a pupil's progress reviewed by the IPRC?

3. Do you attend the IPRC review? What is your role there? (i.e., What information do you present?)

4. How important is your input in the decisions reached?

(i) from your point of view

(ii) from the IPRC point of view

5. Are other reviews held for pupils (besides the IPRC review)? Describe:

V. COMMUNICATION WITH PARENTS

1. **What is your role and responsibility for contacting the parents:**

(i) **prior to the IPRC?**

If not your responsibility, whose responsibility is it?

(ii) **after the IPRC?**

If not your responsibility, whose responsibility is it?

VI. INVOLVEMENT IN THE SPECIAL EDUCATION PROCESS

Where were you working at the beginning of Bill 82 (i.e., 1981-82 school year)?

_____

If you have changed positions since then, when did you start your present position?

_____

RANK THE AMOUNT OF YOUR INVOLVEMENT/SATISFACTION FOR FOR EACH OF THE FOLLOWING QUESTIONS.

1	2	3	4	5
not at all	a little bit	some	quite a lot	very much so

1. IPRC PROCESS

(i) **Has there been an increase or decrease in your involvement in the IPRC process?**

_____

(ii) **Are you satisfied with that involvement? (Rank their response.)**

_____

2. IDENTIFICATION

(i) **Has there been an increase or decrease in your involvement in the process of identifying a pupil (as exceptional) in the regular class? (Rank their response.)**

_____

(ii) **Are you satisfied with that involvement? (Rank their response.)**

_____

3. PLACEMENT

(i) **Has there been an increase or decrease in your involvement in the process of deciding on an IPRC'd pupil's placement?**

_____

(ii) **Are you satisfied with that involvement?**

_____

1	2	3	4	5
not at all	a little bit	some	quite a lot	very much so

4. PROGRAMMING PRIOR TO REFERRAL

(i) Has there been an increase or decrease in your involvement in developing or modifying a pupil's program prior to the child being referred (to special education)?

_____

(ii) Are you satisfied with that involvement?

_____

5. PROGRAMMING AFTER PLACEMENT BY AN IPRC

(i) Has there been an increase or decrease in your involvement in developing a pupil's program after the child is placed by an IPRC?

_____

(ii) Are you satisfied with that involvement?

_____

6. IPRC REVIEW

(i) Has there been an increase or decrease in your involvement in the annual IPRC review?

_____

(ii) Are you satisfied with that involvement?

_____

VII. CONCERNS

When you think about Bill 82, what concerns you most of all at the present time?

TEACHER INTERVIEW

PART TWO

I. NOMINATED PUPILS

1. Could you give me the first names of two students who are of concern to you this year (they may or may not be special education pupils). (Then ask for their ages and also ask if they have been identified by an I P R C as being exceptional and indicate the exceptionality.)

	NAME	AGE	IPRC'd
CHILD A	_____	_____	_____
CHILD B	_____	_____	_____

PROBE: If all two nominated pupils are not special education students (i.e. not IPRC'd), ask if any of the special education students are of concern to them. If so, then quietly replace CHILD B with that special education student.

FOR THE FOLLOWING QUESTIONS, SELECT ONE OF THE NOMINATED PUPILS AND ASK THE FOLLOWING QUESTIONS. THEN ASK THESE QUESTIONS AGAIN FOR EACH OF THE REMAINING NOMINATED PUPILS.

II. CONCERN

1. Briefly, would you describe why CHILD A/B is of concern to you (i.e., the child's difficulties).

CHILD A _____

_____

_____

_____

_____

_____

CHILD B _____

_____

_____

_____

_____

_____

_____

III. GOALS

1. What academic goals would you like to see CHILD A/B achieve this year?

2. What other goals would you like CHILD A/B to achieve this year?

CHILD A _____

CHILD B _____

IV. TEACHER S'EFFORTS

A. REGULAR TEACHER and SPECIAL ED. CLASS TEACHER.

1. What are you doing to help CHILD A/B achieve those goals within your classroom. (Note any mechanical modifications, i.e., groupings, seating, peer pairing, etc., as well as any programming modifications, strategies, etc.)

B. RESOURCE TEACHER

1. What are you doing to help CHILD A/B's teacher to achieve these goals in the regular/sp.ed. classroom? (PROBES: setting goals together, monitoring, team teaching, withdrawal, etc.)

CHILD A _____

CHILD B _____

V. RESOURCES

THE FOLLOWING QUESTIONS ARE TO BE ASKED FOR EACH RESOURCE PERSON THE TEACHER IDENTIFIES.

RESOURCE QUESTIONS

(a) Identify the resource person by role.

(b) When did you first contact them?

(c) Have your continued to be in contact with that resource? If yes, how frequent is that contact?

(d) What assistance have they provided?

(e) Can you please rank on a scale of 1-5, (with 1 being the most useful), how useful that resource has been in helping you to achieve the goals for CHILD A/B.

A. IN-SCHOOL RESOURCES

1. Have you contacted anyone within the school to help you achieve those goals? (If yes, ask resource questions).

CHILD A _____

_____

_____

_____

_____

_____

_____

_____

CHILD B _____

_____

_____

_____

_____

_____

_____

_____

_____

B. SYSTEM RESOURCES:

1. Have you contacted anyone at the Board to help you achieve those goals. (If yes, ask resource questions).

(a) Identify the resource person by role.

(b) When did you first contact them?

(c) Have you continued to be in contact with that resource? If yes, how frequent is that contact?

(d) What assistance have they provided?

(e) Can you please rank on a scale of 1-5, (with 1 being the most useful), how useful that resource has been in helping you to achieve the goals for CHILD A/B.

CHILD A _____

CHILD B _____

C. OUTSIDE RESOURCES:

1. Have you contacted any other people or organizations to help you achieve those goals? (If yes, ask resource questions.)

(a) Identify the resource person by role.

(b) When did you first contact them?

(c) Have you continued to be in contact with that resource? If yes, how frequent is that contact?

(d) What assistance have they provided?

(e) Can you please rank on a scale of 1-5, (with 1 being the most useful), how useful that resource has been in helping you to achieve the goals for CHILD A/B.

CHILD A _____

CHILD B _____

VI. OTHER OUTSIDE RESOURCES

1. **Have any other people or organizations i.e., CAS, Youth Bureau, etc., contacted you about CHILD A/B?**

If yes,

(a) Name the person by role or the organization

(b) Describe that contact, i.e., when was the initial contact, how frequent has it been?

(c) What assistance/input did you provide them?

(d) What assistance/input did they provide you?

CHILD A _____

CHILD B _____

VII. PARENTS

1. Have you had any contact with the parents?

If yes, (a) When were the parents first contacted?

(b) Who initiated it?

(c) Has that contact continued?

If yes, how frequent has the contact been?

If no, why not?

(d) What type of input or assistance have they provided to you?

(e) Can you please rank on a scale of 1 to 5, (with 1 being the most useful), how useful the parents have been in helping you work on achieving the goals for CHILD A/B.

If no, who has the responsibility for contacting CHILD A/B's parents?

CHILD A _____

CHILD B _____

VIII. INDIVIDUAL PROGRAM PLAN

Do you have something like an individual program plan for CHILD A, or B? (If yes, ask for a copy. Look it over and add any goals that the teacher had not mentioned.)

CHILD A _____

CHILD B _____

APPENDIX C3

Février 1985 Année 3

Entrevue avec le directeur d'école

I. Identification

A. Activités précédant la référence

1. Dans votre école, avez-vous mis en place certaines procédures à suivre avant que l'on réfère un enfant pour évaluation par le C.I.P.R.?
Sujets possibles : 1. Observation
2. Évaluation informelle
3. Consultation
4. Modification à l'intérieur de la salle de classe

2. Lorsque le progrès académique ou le comportement d'un élève l'inquiète, quelles procédures un(e) enseignant(e) doit-il(elle) suivre?

3. Combien longtemps peuvent durer l'ensemble des activités entreprises avant que l'on réfère l'enfant au C.I.P.R. (procédure d'évaluation et de contrôle)?

4. A-t-on tenté de modifier à l'intérieur de la salle de classe le comportement de l'enfant? Comment et pendant combien longtemps?

5. Avant que l'on réfère l'enfant au C.I.P.R., à quel moment implique-t-on les parents? Comment les implique-t-on? À qui revient la tâche d'informer les parents?

B. L'évaluation

L'évaluation informelle de l'enfant à l'intérieur de l'école et ce, afin de l'aider.

1. Avant de songer à référer un enfant au C.I.P.R., l'évalue-t-on dans le but d'aider les personnes impliquées dans l'école-même à répondre aux besoins de celui-ci?

2. Quels sont les diverses composantes de cette évaluation?

3. Qui évalue l'enfant?

4. Que fait-on des résultats de cette évaluation? En d'autre termes, suite à l'évaluation, élabore-t-on un programme pour utilisation à l'intérieur de la salle de classe, qui a pour but d'aider à modifier le comportement de l'enfant? Si oui, comment choisit-on les aspects à modifier?

L'évaluation formelle : Celle-ci est présentée au C.I.P.R. et peut comprendre des éléments d'évaluation psychologique et d'évaluation académique.

1. Combien longtemps s'écoule normalement entre le moment où l'on réfère un enfant pour une évaluation psychologique et le moment actuel de l'évaluation?

2. Quels tests standardisés utilise-t-on?

3. Qui est chargé de l'évaluation psychologique de l'enfant?

4. Lors de la réunion du C.I.P.R., comment utilise-t-on les résultats de l'évaluation?

5. Communique-t-on les résultats de l'évaluation à l'enseignant(e) impliqué(e)? Aux parents? À qui revient la tâche de communiquer les résultats?

C. Le rôle du C.I.P.R.

1. Décrivez les divers niveaux du C.I.P.R. dans votre conseil scolaire.

2. Quel est le rôle de chacun des niveaux du C.I.P.R.? Êtes-vous responsable de recueillir les renseignements, de les organiser et de les présenter au C.I.P.R.? Veuillez expliquer votre réponse.

3. Quel genre de renseignements fournissez-vous à chacun des niveaux du C.I.P.R.?

II. Dresser les objectifs et le plan des programmes

A. Le contrôle des programmes

1. Qui contrôle la mise en oeuvre des programmes d'éducation spéciale?

2. Combien souvent examine-t-on de près ces programmes?

3. Quels critères utilise-t-on lors de cet examen?

4. Si des changements s'avèrent nécessaires, comment les effectue-t-on?

B. Les objectifs du directeur d'école

1. (Rappeler au directeur les objectifs de l'Année 1.) Jusqu'à quel point avez-vous réalisé ces objectifs?

2. Quels changements avez-vous apportés à vos propres objectifs?

3. Quelles circonstances ont encouragé la réalisation de ces objectifs?

4. Quelles circonstances ont nui à la réalisation de ces objectifs?

III. Le modèle de mise en oeuvre

A. La formation professionnelle : les initiatives prises par le conseil scolaire

1. Au cours de la dernière année, qu'a fait votre conseil scolaire afin de préparer ses employés aux changements qui seront actualisés en septembre 1985?

2. (À l'intention des directeurs d'écoles secondaires) Au cours de la dernière année, qu'a fait votre conseil scolaire afin de préparer ses employés aux changements relatifs à l'éducation spéciale qui seront occasionnés par la mise en oeuvre de l'EOCIS?

B. La formation professionnelle : les initiatives prises par certaines personnes

1. Au cours de la dernière année, quel genre de formation professionnelle avez-vous entreprise relative à la mise en oeuvre des programmes d'éducation spéciale?

2. Quels objectifs aimeriez-vous être en mesure de réaliser d'ici le 1 septembre 1985? Sujet possible : sont-ils différents de vos objectifs pour l'Année 1 et, si oui, comment?

3. Avez-vous eu à répondre aux inquiétudes de vos employés en ce qui concerne la mise en oeuvre du Bill 82 et le plan de votre conseil scolaire qui y a trait? Si oui, quelles inquiétudes ont été soulevées et comment y avez-vous répondu?

IV. Revue du placement et du progrès des élèves

A. La revue par le C.I.P.R.

1. Dans votre école, après qu'un enfant ait été placé, combien souvent revoit-on son cas?

2. Qui entreprend le processus de revue?

3. Êtes-vous impliqué dans le processus de revue? Si oui, comment?

4. Identifiez les autres personnes impliquées dans le processus de revue.

5. Quel genre d'informations considère-t-on? Qui fournit ces informations?

6. Quel genre de décisions prend-t-on?

7. Les parents sont-ils impliqués à ce stade? Si oui, comment?

a. Par le passé, à la lumière des informations présentées lors du processus de revue, avez-vous modifié votre décision quant au placement d'un enfant?

b. Par le passé, à la lumière des informations présentées lors du processus de revue, avez-vous modifié le programme d'un enfant (c'est-à-dire, le plan du programme, les services, les objectifs d'apprentissage, les ressources, etc.)?

8. En général, combien longtemps peut prendre la revue du dossier d'un enfant par le C.I.P.R.?

V. La communication avec les autres personnes pertinentes

1. Le Guide des parents est-il présentement disponible? L'a-t-on disséminé? Comment les parents peuvent-ils s'en procurer un exemplaire?

2. Depuis notre dernière conversation, avez-vous tenté d'informer les parents quant à leur rôle et leurs droits relatifs au Bill 82?

VI. L'évaluation du modèle de mise en oeuvre

A. Le modèle pour l'école

1. En ce qui a trait aux programmes d'éducation spéciale dans votre école, que faites-vous afin de jauger le succès du modèle de mise en oeuvre pour ceux-ci?

2. Dans votre école, jusqu'à quel point les enseignants répondent-ils actuellement avec succès aux besoins des enfants exceptionnels?

3. Dans votre école, jusqu'à quel point la gamme de ressources répond-t-elle ave succès aux besoins des enfants exceptionnels? (L'école requiert-elle une gamme plus large de ressources ayant pour but d'aider de façon directe l'enseignant(e) en salle de classe?)

B. Le Bill 82

1. Lorsque vous considérez le fait que les programmes relatifs au Bill 82 seront bientôt mis en oeuvre, quels aspects vous inquiètent le plus?

2. Suite à la mise en oeuvre, en septembre 1985, des programmes relatifs au Bill 82, à votre avis, quelles seront les questions majeures à débattre?

VII. Le style de leadership

1. Comment décririez-vous votre rôle principal quant aux programmes d'éducation spéciale dans votre école?
Sujets possibles : Etes-vous le genre de personne qui
   a. exprime les politiques du conseil scolaire en termes d'un ensemble de procédures à suivre et qui assigne ensuite les tâches à accomplir? (administrateur)
   b. s'implique directement dans l'élaboration des programmes et appuit ses employés lorsqu'il s'agit d'en arriver à une décision au sujet d'un enfant? (facilitateur)
   c. préfère se charger personnellement des problèmes et s'impliquer directement avec chacun des enfants exceptionnels? (personne d'action)

APPENDIX C4

Entrevue avec les enseignants - version révisée

À l'enseignant en éducation spéciale :

À des fins de discussion, choisissez 2 ou 3 de vos élèves qui vous préoccupent le plus; répondez ensuite aux questions suivantes en fonction de ces élèves.

À l'enseignant dans une classe régulière :

Combien d'enfants exceptionnels sont intégrés à votre classe régulière?

_____.

En termes de la liste de classe, de quelle classe font-ils partie?

_____.

Comment ces enfants sont-ils exceptionnels?

_____

Choisissez 2 ou 3 élèves qui vous préoccupent le plus; répondez ensuite aux questions suivantes en fonction de ces élèves.

Votre classe

1. Quels sont vos objectifs principaux relatifs à ces élèves?

_____

_____

_____

2. Comment choisissez-vous les objectifs à réaliser avec ces élèves?

_____

_____

_____

3. Quelles stratégies pédagogiques utilisez-vous avec ces élèves?

_____

_____

_____

4. Comment choisissez-vous les stratégies à travailler avec ces élèves?

5. Quels critères utilisez-vous afin d'évaluer ces élèves?

6. Lorsque le progrès académique ou le comportement d'un élève vous inquiète, qu
faites-vous en premier lieu?

Ressources

7a. Quelles ressources ont été établies au niveau de l'école afin de vous aider
répondre aux besoins d'un élève? Veuillez classer ces ressources selon le rôle
que chacune joue.

7b. Comment ces ressources vous aident-elles? Pendant combien longtemps chacune
de celles-ci est-elle utile?

7c. En général, jusqu'à quel point ces ressources sont-elles utiles? Veuillez
les ordonner de 1 à 5, 1 étant la plus utile.

8a. Quelles ressources ont été établies au niveau du conseil scolaire afin de vous aider à répondre aux besoins d'un élève? Veuillez classer ces ressources selon le rôle que chacune joue.

8b. Comment ces ressources vous aident-elles? Pendant combien longtemps chacune de celles-ci est-elle utile?

8c. En général, jusqu'à quel point ces ressources sont-elles utiles? Veuillez les ordonner de 1 à 5, 1 étant la plus utile.

9. Pendant la phase de référence, à quel moment implique-t-on les parents?

10. Avez-vous utilisé le matériel de soutien ou le matériel pédagogique relatifs à l'enfance exceptionnelle, qui est disponible au conseil scolaire? Veuillez identifier le matériel utilisé.

11. Dans votre école, y a-t-il beaucoup d'échange entre les enseignants en classes régulières et les enseignants en éducation spéciale? Si non, pourquoi? Comment pourrait-on faciliter la communication entre ces deux groupes?

12. Quel est le rôle du directeur de l'école quant à l'éducation spéciale?

13. Dans votre école, qui a informé les parents au sujet du Bill 82? Comment c informations ont-elles été transmises?

Comité d'identification, de placement et de référence (C.I.P.R.)

14. À votre avis, quel est le rôle du C.I.P.R.?

15. Avez-vous déjà participé en quelque sorte à un C.I.P.R.? Quelle était votr fonction?

16. Quel genre de renseignements le C.I.P.R. considère-t-il avant d'en arriver une décision? Y a-t-il un genre de renseignements qui est plus important que l autres?

17. À votre avis, le C.I.P.R. représente-t-il un processus utile? Veuillez expliquer votre réponse.

Le Bill 82

18. Si on vous demandait de décrire les divers points du Bill 82 à un collègue, comment bien pourriez-vous le faire?

19. Quels points du Bill 82 souligneriez-vous plus particulièrement?

20. En ce qui concerne le Bill 82, à quoi s'attend-t-on de vous? Ces attentes sont-elles réalistes? Veuillez expliquer votre réponse.

21. Êtes-vous confiant(e) que vous possédez les habiletés nécessaires pour répondre à ces attentes?

22. Votre rôle a-t-il changé à cause du Bill 82? Si oui, comment?

23. À votre avis, quel genre d'informations les enseignants ont-ils besoin en ce qui concerne le Bill 82 et les politiques et les procédures de votre conseil scolaire relatifs à la mise en oeuvre des programmes? Quel genre de formation professionnelle additionnelle les enseignants ont-ils besoin afin de pouvoir mettre en oeuvre les programmes du conseil scolaire?

24. Lorsque vous considérez le fait que les programmes relatifs au Bill 82 seront bientôt mis en oeuvre, quels aspects vous inquiètent le plus?

25. Quels aspects vous plaisent le plus?

_____

_____